## Research on the Information Disclosure Mode of Green Accounting Information of Enterprises under the Low Carbon Economy

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#### **Abstract**

As a new economic development model, low-carbon economy abandons the traditional resource-consuming development. This new ecological concept provides the necessary theoretical basis for the establishment of green accounting. Therefore, enterprises should clarify their own green assets, green liabilities and green effects. Adopt diversified measurement methods to clarify the use of natural resources by enterprises in the process of production and operation, realize the impact and compensation on the environment, consider from the overall level, and provide more comprehensive environmental information and financial statements. Based on this, the article mainly discusses the research on the information disclosure mode of green accounting in enterprises under the low-carbon economy.

### **Keywords**

Low-carbon Economy; Corporate Green Accounting; Information Disclosure Mode.

### 1. Introduction

The high-input and low-output business model of traditional manufacturing enterprises has extremely adverse effects on the natural environment and inhibits the sustainable development of enterprises. An effective green accounting system can help enterprises balance economic benefits and development speed, and coordinate economic goals with The relationship between the natural environment lays the foundation for the sustainable development of the enterprise.

# 2. Overview of Corporate Green Accounting Information Disclosure Mode under Low Carbon Economy

The core of low-carbon development is based on sustainable development, improving energy utilization efficiency, improving the energy structure of enterprises, reducing greenhouse gas emissions as much as possible, achieving carbon neutrality, and building a production model with low consumption and high production capacity. The operation mode of green accounting can help enterprises to clarify their own problems in environmental protection and urge enterprises to fulfill their main responsibilities.

### 2.1. Low Carbon Economy

Low-carbon economy is a new concept under the concept of sustainable development. Traditional enterprises use technological innovation, industrial transformation, new energy development and other means to reduce the consumption of high-carbon energy such as coal and oil as much as possible, thereby reducing greenhouse gas emissions and realizing economic and ecological Coordinated development. The low carbon economy first appeared in the UK's Energy White Paper. Enterprises often need to consume a large amount of energy in the daily production process. Therefore, enterprises should assume their own social responsibilities and abandon the development method of pollution first and then treatment, and low-end and high-

end development. Introduce new technologies and new means to realize the recycling of materials and energy, vigorously develop the circular economy, and promote clean production, so as to promote the comprehensive, coordinated and sustainable development of the economy.

### 2.2. Green Accounting

From a broad perspective, green accounting is a new type of accounting, while from a narrow perspective, green accounting is a branch of corporate accounting. In addition to inheriting the traditional basic business such as cost accounting and financial management, green accounting is faced with many innovations. Green accounting should not only meet the daily needs of enterprises, but also comprehensively consider ecological benefits. It needs to combine different fields such as environmental science, environmental economics, and development economics to reflect the actual benefits of enterprises from an ecological perspective. The essential function of green accounting is to reflect and supervise, to introduce green accounting into the daily management process of the enterprise, to timely control the environmental behavior of the enterprise, and to promote the continuous transformation within the enterprise.

# 3. Necessity of Corporate Green Accounting Information Disclosure Mode under Low Carbon Economy

In the "14th Five-Year Plan", the importance of energy conservation and emission reduction is clearly pointed out. Traditional enterprises should change their economic growth model, adjust their industrial structure, transition to the direction of high output and low energy consumption, and build an environment-friendly enterprise.

#### 3.1. The Needs of the Environment

Traditional accounting takes the company's net cash flow as the core, and does not consider environmental, ecological and other influencing factors. Green accounting defines resources and the environment as the property shared by all mankind and future generations. In the actual operation process, the environment is converted into artificial capital to determine the best conversion ratio. Compared with traditional accounting, environmental factors should be Incorporated into the overall assessment report system, highlighting the comprehensiveness and sustainability of enterprise development.

#### 3.2. The Needs of Enterprises

In traditional financial reports, the balance sheet, cash flow statement and balance sheet are the core, the authenticity and objectivity of the information are limited, and social costs are ignored, resulting in unreasonable subsequent tax planning. Based on the limited nature of natural resources, green accounting theory defines various elements in the development process of an enterprise, considers it from an overall level, and makes up for the shortcomings of traditional operating information, so as to maintain the long-term development of the enterprise.

# 4. Problems Encountered in Corporate Green Accounting Information Disclosure Mode under Low-carbon Economy

(1) Lack of a complete theoretical system. Green accounting is based on finance, accounting, and auditing, and integrates environmental studies, economics, and management studies. Compared with the West, the research on green accounting in my country started relatively late. At present, no feasible laws and regulations have been formed, and there is a lack of a perfect industry system. Based on their own interests, enterprises selectively disclose and conceal information that is not beneficial to them, resulting in weak objectivity and integrity of

information, messy and unfixed disclosure content, single and non-standard forms, and it is difficult to form a complete management system.

- (2) The subjects involved are complex. At present, my country is in a critical period of economic structural reform, and the contradiction between resources and the environment is becoming more and more acute, restricting high-polluting, high-energy-consuming and low-efficiency enterprises. Environmental issues. However, in actual production, including agriculture, forestry, land, taxation and other different units, the behavior of participants is based on their own interests to measure value, which is prone to conflicts, and it is difficult to quantify green assets, green liabilities, and green effects.
- (3) Information ambiguity is strong. Different from traditional accounting operations, green accounting integrates various disciplines such as economics and environmental science. In the process of information management, there are a large number of fuzzy indicators, and the diversification of measurement units makes it difficult to quantify information. In addition, the elements of green accounting are relatively difficult to calculate, and the overall ambiguity is strong, making it difficult to provide effective technical guidance for enterprises.

# 5. Research on the Information Disclosure Mode of Green Accounting Information of Enterprises under the Low Carbon Economy

### 5.1. Integrate Multiple Information Disclosure Models

Accounting information disclosure is a relatively complex process, and it is necessary to prepare an independent green accounting report, and issue a green balance sheet, a green profit and loss statement, and a green cash flow statement in the form of a traditional financial accounting report. Green accounting reports are independent, not attached to traditional accounting statements, and effectively disclose non-monetary performance information to help decision makers understand the financial status of the company's daily operating activities and environmental information. Therefore, companies should vigorously develop internal operations. It is required to combine multiple methods such as on-balance sheet disclosure and off-balance sheet disclosure to build a comprehensive information management model.

- (1) Disclosure in the table. The disclosures in the table mainly include environmental costs, environmental income, environmental expenses and other different items, which comprehensively reflect the income and expenditure of enterprises in pollution prevention and control. A comprehensive display of the costs and benefits related to the environment in the production and operation of enterprises. Integrate the three methods of profit and loss statement disclosure, balance sheet disclosure and cash statement disclosure, refine the cash expenditure and inflow of enterprises in pollution prevention and discharge, analyze the cash transfer rate of intangible assets and the utilization rate of environmental protection equipment, start from the overall level, and construct Comprehensive information disclosure mechanism.
- (2) Off-balance sheet disclosures. Off-balance sheet disclosure mainly includes the disclosure of the financial report statement and the disclosure of the notes to the financial report. During the operation process, accountants should clarify the environmental problems faced by the enterprise in the process of development, dynamically track the changes and requirements of external environmental regulations, and use capital management and equipment depreciation., environmental asset measurement and other means. Enrich environmental accounting content information, reduce unnecessary workload, and build a complete operating system. In various forms such as environmental protection manuals, temporary work records, board reports and information briefings, the green accounting information existing in the enterprise is explained and reported.

### 5.2. Clarify Multi-dimensional Indicators

There is a lot of ambiguous information in the actual operation process of green accounting. Therefore, in the operation process, alternative indicators should be used as much as possible to minimize errors and be relatively accurate. Low-carbon economy advocates an economic model of harmonious development of the environment. Therefore, environmental factors should be incorporated into the overall accounting system, redefining the cost and expense of an enterprise's assets and liabilities, and using traditional accounting information elements to determine green assets and green liabilities, green fees, and lay the foundation for subsequent information disclosure. Green accounting is a comprehensive and systematic project, which requires professional technical talents to manage. Enterprises should provide technical employees with a good development space, comprehensively improve the knowledge quality of employees, and form data-based and intelligent ecological restoration methods., to achieve data-based monitoring and management. In the process of cost accounting, focus on cost control, applicability analysis and durability management, and integrate various data such as hydrology, meteorology, remote sensing, and economics to realize self-update and closed-loop processing of data. Establish a multi-dimensional data collection model, a comprehensive environmental function evaluation model, and a pollution emission forecast model, etc., to promote the development of intelligent and convenient analysis of the ecological environment. Determine the scope of application between the sub-model and the model, comprehensively consider the difference between the evaluation accuracy and the selection basis, and establish an automatic alarm mechanism to achieve the purpose of rapid processing. The environmental information generated by enterprises in the production process can be roughly divided into two categories: market information and technical information. Therefore, in the actual green reporting process, the management model of main table + annex should be adopted to fully disclose the environmental information of the enterprise. In the actual operation process of green accounting, the principle of objective and consistent relevance is implemented, and the " Accounting Law of the People's Republic of China", "Securities Law of the People's Republic of China". "Environmental Protection Law of the People's Republic of China" and "Company Law of the People's Republic of China" are strictly enforced. Correctly handle the relationship between the economic interests of enterprises and ecological protection, from the perspective of ecology, comprehensively reflect the loss and pollution control of the ecological environment by enterprises, and must not conceal or underreport, or mislead the government and consumers with false information. Digitized environmental information such as the company's financial status, operating results, and cash flow should be disclosed in the form of annual accounting reports. The attached table mainly shows some non-quantitative statements, including the main responsibilities performed by enterprises in environmental management, what contributions they have made to environmental protection, and better reflect the operation information of enterprises in green accounting through the mechanism of classified management. At the same time, it is necessary to build a comprehensive quality dimension, integrate multiple indicators such as relevance, understandability, comparability and timeliness, construct evaluations from different dimensions, and divide the environmental information disclosure mechanism of enterprises into primary indicators and secondary indicators. A comprehensive management mechanism can timely reflect the company's carbon emissions and total greenhouse gas emissions, ensure the completion of low-carbon production, and introduce a third-party inspection agency to ensure the independence and impartiality of the overall inspection. Realize the exchange and conversion of financial information, improve the accuracy of information, and improve work efficiency through online operations. Pay attention to the research and development and management of centralized accounting platforms to improve the core competitiveness of enterprises. Realize the multi-level

development of the enterprise's capital chain, effectively improve the internal financial management system, and improve the speed and accuracy of data processing.

### **5.3.** Constructing Green Indicators

Low-carbon economy advocates an economic model of harmonious development of the environment. Therefore, environmental factors should be incorporated into the overall accounting system, redefining the cost and expense of an enterprise's assets and liabilities, and using traditional accounting information elements to determine green assets, green Liabilities, green costs, and green benefits lay the foundation for subsequent information disclosure.

- (1) Green assets. Green assets are a basic element in green accounting performance accounting. In a broad sense, green assets refer to all natural resources and ecological resources, while in a narrow sense, green assets are environmental resources that enterprises can obtain direct or indirect interests. Environmental resources measured in currency. Green assets have certain availability, reliability and relevance to accounting subjects. Compared with other assets, green assets have higher purification capacity and can be updated, but recovery requires higher time and economic costs. For example, in actual accounting, it is necessary to use accounting measurement methods to divide green assets into natural resource assets and ecological resource assets to reflect the characteristics and complexity of green assets. In the actual accounting process, it is necessary to make reasonable estimates of unknown natural resources. Clarify the core concepts of the asset. To fully reflect the stock and flow information of green assets, the increase in the current period, the discounted amount for the current period, and the stock at the end of the period should be specified in the disclosure report, so as to provide more information to the outside world to ensure the openness and transparency of the information.
- (2) Green liabilities. Green liabilities refer to the fines or fines paid by enterprises for violating environmental protection laws and regulations, or other administrative or legal responsibilities that should be performed. Green asset is a relatively rich concept, which is different from general liabilities. It is characterized by strong traceability, high uncertainty, and certain joint and several liabilities. Enterprises need to be primarily responsible for the cost of environmental restoration. Therefore, accountants must accurately grasp the probability and timing of the occurrence of total green liabilities. It is necessary to explain the nature and conditions of major debt items and disclose future cash flow trends. In the actual management process, accountants should integrate sewage charges, environmental protection facility installation charges, and waste purification charges, predict possible problems in the future, and draw reserves in time to ensure the sustainable development of the enterprise.
- (3) Green cost. Green cost is a relatively grand concept. At present, the domestic cognition of green cost is not uniform. It mainly includes environmental management fees for waste storage products, environmental treatment fees, environmental restoration costs, and environmental comfort costs. Therefore, in the actual operation process, the depreciation expenses and office expenses of environmental prevention equipment should be determined according to the products and characteristics of the enterprise, and the early management should be strengthened to avoid large environmental fines.
- (4) Green benefits. Green benefits can be divided into direct, green benefits and indirect green benefits. Green benefits mainly refer to the accumulation of wealth for enterprises by acquiring tangible assets, while indirect green benefits mainly refer to some intangible assets. will have a positive impact on society. In the calculation process, accountants should use environmental economics, economic mathematics and other disciplines to build a sound management model, combine current costs and fair value, and clarify future cash flows to reduce marginal costs.

### 6. The Development Trend of Corporate Green Accounting under the Low-Carbon Economy

### **6.1.** Integrated Development

The integrated development is essentially a combination of modules with different functions, and the integrated development of accounting systems is an inevitable requirement of the intelligent age. As far as the current environmental design process is concerned, there is a serious waste of resources. Therefore, in the future development process, green accounting should integrate multiple practical functions, use multiple ecological means to control multiple functions, optimize resource allocation, and achieve refined and integrated operations.

### 6.2. Modular Development

In the era of data, enterprises have a lot of information in production and operation. In the future development process, green accounting will dynamically collect environmental factors, and evaluate pollution sources and pollution levels through remote monitoring, real-time analysis, and dynamic control. It integrates online monitoring, data collection, modeling analysis, remote control and other methods to establish a corresponding environmental protection database to provide data support for subsequent environmental protection work.

### 7. Summary

With the rapid development of information technology, the traditional accounting model can no longer meet the requirements of the times. Therefore, many enterprises have adopted the green accounting system, and financial personnel should analyze specific problems and optimize the centralized accounting method according to the current development status of the enterprise. Based on its own situation, strengthen the internal supervision and management mechanism, build a relatively complete information exchange platform, improve work efficiency, and promote the long-term development of the enterprise.

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