

Research on Environmental Accounting Information Disclosure - Taking Listed Companies in the Brewing Industry as an Example

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Abstract: *One of China's most polluting businesses, the brewing sector, has environmental accounting information that should be disclosed. The statistics of 35 listed companies in the brewing industry in 2021 regarding the disclosure of environmental accounting information are used in this paper, along with an analysis of the status and current issues surrounding the disclosure of environmental accounting information in 2021, to make practical recommendations for improving the level of information disclosure of listed companies in the brewing industry.*

Keywords: *environmental accounting; Brewing industry; Information disclosure*

1. Introduction

The pollution and destruction of the environment by industrial enterprises has a direct impact on the ecosystem. Therefore, strengthening the supervision of the environmental work of relevant industrial enterprises is conducive to the implementation of national ecological civilization construction. In this context, it has become inevitable to include environmental accounting items in the accounting system. At the same time, environmental accounting will also play an increasingly important role in the accounting system of enterprises. In recent years, China's relevant laws and regulations have become more and more strict on the disclosure of corporate environmental information. The study and analysis of environmental information disclosure can help enterprises improve the efficiency of environmental protection work. The liquor-making industry is one of the heavy pollution industries in China, this study selected the 35 the liquor-making enterprises as the research object, for its 2021 annual environmental accounting information disclosure is analyzed, finding out the existing problems of environmental protection consciousness to improve liquor-making industry put forward the reasonable suggestion, expect to help to environmental accounting information disclosure in China.

2. Status quo of environmental accounting information disclosure of listed companies in China's brewing industry

2.1. Sample Selection

Because the number of enterprises in the brewing industry is very large, it is impossible to analyze everything. Therefore, this paper selects listed companies in the brewing industry as the research sample. Basis on the research on the accessibility of public data, this paper selects 38 listed companies in the brewing industry for empirical research. Through the public information review and collation, as of December 31, 2021, there are 38 listed companies in the brewing industry in Shanghai and Shenzhen AB share listed companies. Among the 38 brewing enterprises, there are three ST companies and *ST companies, respectively ST Portugal, *ST Portugal, and *ST Xifa, these companies are in the abnormal financial condition in recent years or the company's stock has the risk of termination of the listing of the company. On the premise of ensuring the accuracy of the research results, these three companies were excluded, and 35 brewing companies were selected as the research sample.

2.2. Disclosure methods of environmental accounting information of listed companies in China's brewing industry

Through screening, this paper took 35 listed companies in the brewing industry as samples, and

counted the environmental accounting information of the industry in 2021 through the annual report, environmental report, social responsibility report, and ESG report, to analyze the environmental accounting information disclosure of the industry as shown in the table below^[1]:

Table 1: Methods of environmental information disclosure in the brewing industry in 2021

The serial number	code	The enterprise referred to as"	The annual report	Environmental Reports	Social Responsibility Report	ESG report
1	600519	Guizhou Maotai	√			√
2	000858	Wu Liang ye	√		√	
3	600809	Shanxi fenjiu	√			√
4	000568	Luzhou laojiao	√		√	
5	002304	Yanghe shares	√		√	
6	000596	Flavoring liquor	√		√	
7	600600	Qingdao beer	√			√
8	600702	Willing to give up alcohol	√		√	
9	600132	Chongqing beer	√			
10	000799	Drunk wine	√			
11	603369	For this reason	√		√	
12	600779	Shui jing fang	√			√
13	603198	Ying gong wine	√	√		
14	002568	Bairun will co	√			
15	603589	Open pit	√			
16	000860	The agreeable lei agriculture	√			√
17	600559	Tempting wine	√		√	
18	000729	Yanjing beer	√			
19	002461	The pearl river beer	√			
20	603919	Jin Hui wine	√			√
21	603027	QianHe flavor industry	√			
22	000869	Changyu a.	√		√	
23	600305	Hengshun vinegar industry	√	√		
24	600197	The force,	√		√	
25	600059	Guile longshan	√		√	
26	600199	Golden seed wine	√			
27	002646	God bless, wine	√		√	
28	600238	Hainan coconut island	√			
29	601579	Will kuaijishan	√		√	
30	600616	Jingfeng wine	√		√	
31	000995	The emperor Taiwan liquor	√			
32	603779	Veyron co	√			
33	600573	HuiQuan beer	√		√	
34	600543	Moga co	√		√	
35	000929	The Yellow River in lanzhou	√			

Table 2: A 2021 Summary of Environmental Disclosure channels for the Brewing industry

year	The total number of companies	The annual report		Environmental Reports		Social Responsibility Report		ESG report	
		Number of	Accounted for %	Number of	Accounted for %	Number of	Accounted for %	Number of	Accounted for %
2021	35	35	100%	2	6%	14	40%	6	17%

It can be seen from Table 1 and Table 2 that environmental accounting information disclosure in annual reports is still the first choice of most companies. In 2021, there are 35 listed companies in China's brewing industry whose environmental accounting information is fully disclosed through annual reports. On the one hand, China has increased its attention to ecological environmental protection in recent years, on the other hand, in December 2017, the China Securities Regulatory Commission (CSRC) required listed enterprises to disclose environmental information in the annual

report and semi-annual report. In the face of this pressure from regulators, listed enterprises in the brewing industry have also paid attention to the disclosure of information in environmental accounting. Choice of environmental accounting information disclosure in the environmental report in only two companies, is driving gong wine and Hengshun vinegar industry, accounted for 6%, the content is a more detailed environmental report, involved relatively complete environmental accounting information, is the enterprise to make a report on environmental situation separately. Therefore, enterprises need to also need to pay additional costs. Therefore, when the disclosure requirements are not unified, few companies adopt such a disclosure method. 15 companies choose to disclose social responsibility report way, accounting for 43%, of the China Securities Regulatory Commission and the Shanghai stock exchange information about the environment under the influence of relevant guidance documents, the enterprise began gradually to choose disclosure of environmental information through social responsibility reports, through the social responsibility report can express themselves more willing to attach importance to environmental protection for enterprises to establish a positive image in society. Finally, 6 enterprises were using ESG reports for environmental information disclosure, accounting for 17%. Under the guidance of the China Securities Regulatory Commission and the promotion of the market, gradually some enterprises began to disclose ESG information.

The above analysis elucidated the way of environmental information disclosure of listed enterprises in China's brewing industry. In China, there is no unified standard for environmental information disclosure, and the environmental information disclosure of each listed enterprise is relatively random^[2]. The brewing industry is one of the most heavy pollution industries in China. Among the 35 listed brewing enterprises, only a low proportion of enterprises choose to disclose the environmental information comprehensively and deeply in the environmental report, social responsibility report, or ESG report, and all enterprises choose to disclose the environmental information briefly in the annual report.

2.3. Contents of environmental accounting information disclosure of listed companies in China's brewing industry

By analyzing the characteristics of listed companies in the brewing industry, this paper selects four environmental accounting evaluation indicators, including environmental investment, environmental performance, environmental management, and environmental protection measures, and subdivides 15 sub-items to statistically analyze the environmental accounting information disclosure content of each enterprise. The selected environmental accounting evaluation indicators are based on the "Guidelines for Information Disclosure of Listed Companies" issued by the Ministry of Environmental Protection in 2010, and are mainly based on the eight items that listed companies in 16 categories of heavy pollution industries are forced to disclose and the ten items that are encouraged to disclose.

Based on the analysis of the above disclosure statistics, 91.42% and 71.43% of enterprises choose to disclose information on sewage treatment projects and air pollution prevention and control, respectively. These represent the support of enterprises for environmental policies. Enterprises are often more willing to disclose the projects of policy planning, while boiler renovation and energy-saving technology renovation disclose less information. About environmental performance, a higher proportion of enterprises for brewing waste and pollutant type and quantity of the disclosure, suggests that enterprises pay more attention to monitoring pollutants, more companies have contaminants in place, but for the brewing of scrap recycling of vinasse disclose less, about to reuse the waste vinasse process not mature enough. In terms of environmental management, more enterprises choose to disclose the environmental protection concept and the completion of environmental protection work, which shows the determination of enterprises to protect the environment, but the disclosure proportion of environmental protection publicity and education is small, indicating that enterprises do not pay enough attention to voluntary environmental protection activities. Finally, from the perspective of environmental protection measures, it can be seen that enterprises are paying more and more attention to environmental protection. Whether it is the establishment of environmental protection departments, the preparation of emergency plans for environmental emergencies and environmental self-testing schemes, or the construction of environmental protection facilities, there are a large proportion of enterprises to disclose. It can be seen that more companies began to pay attention to the obligations of listed companies in environmental protection, and take practical actions to complete their obligations.

Table 3: Statistical analysis of environmental accounting information disclosure content

project	Disclosure of the content	The company number	To disclose the number	Accounted for	Quantitative number of disclosures	Accounted for
Environmental protection investment	The boiler transformation	35	15	42.86%	5	14.29%
	Energy-saving technology renovation	35	13	37.14%	1	2.86%
	Sewage treatment works	35	32	91.42%	15	42.86%
	Air pollution prevention	35	25	71.43%	20	57.14%
Environmental performance	Distilling waste lees utilization	35	9	25.71%	1	2.86%
	Brewing waste disposal	35	13	37.14%	2	5.71%
	Types and amounts of brewing pollutants	35	17	48.57%	7	19.44%
Environmental management	Environmental protection concept	35	20	57.14%	1	2.86%
	Environmental Publicity and education	35	9	25.71%	1	2.86%
	Environmental Committee Sub-Committee	35	4	11.43%	0	0
	Environmental protection work completed	35	18	51.43%	3	8.57%
Environmental protection measures	Setting up an environmental department	35	18	51.43%	3	8.57%
	Emergency response plan for environmental emergencies	35	31	88.57%	0	0
	Environmental self-detection scheme	35	31	88.57%	0	0
	Construction of environmental protection facilities	35	28	80%	0	0

The statistical analysis of the sample company disclosure status found that the current Chinese brewing industry listed enterprise's environmental accounting disclosure is more dispersed, with environmental information disclosure in different positions in different reports. More enterprises choose to disclose some practical value that is not high policy information and government departments are required to disclose the project, to show their environmental willingness and efforts in environmental protection work in front of the government and the public, and less mention of the enterprise itself for environmental protection spontaneously made any contribution. At the same time, it also exposed that listed enterprises in the brewing industry have selective disclosure of environmental information.

According to the disclosure statistics in the above table, the disclosure content can be divided into qualitative disclosure and quantitative disclosure. In each item, the proportion of qualitative disclosure is much higher than that of quantitative disclosure, which to a certain extent reflects that most enterprises prefer to disclose their environmental information in the form of text information. Qualitative proportion is different from quantitative disclosure, disclosure of environmental information disclosure is based on a large number of text information, lacking the support of data, and

the information that is disclosed is often not enough accurate, comprehensive and quantitative disclosure can use intuitive data information for information users to understand the real environmental information, it also suggests that liquor-making industry subjective intend to lower the accurate disclosure of listed companies.

3. Problems in the disclosure of environmental accounting information of listed enterprises in China's brewing industry

3.1. Lack of unified disclosure standards

At present, when environmental accounting information is disclosed by listed companies in China, the relevant regulatory departments do not have a unified standard for the disclosure of content and disclosure methods, which leads to a large number of enterprises in an environmental accounting information disclosure to the interest as the guidance, selective disclosure. The environmental accounting disclosure of various enterprises is also messy in content, and the quality of disclosure does not have great reference value for information users. At the same time, different brewing enterprises use different ways to disclose environmental accounting information. Up to now, all listed enterprises in the brewing industry had environmental information disclosure in their annual reports. Some enterprises disclose environmental information through social responsibility reports or ESG reports, and very few enterprises choose to disclose environmental information in the environmental report. Therefore, we can see that the industry has not set a unified disclosure standard for the environmental accounting information disclosure of listed companies in the brewing industry. Each enterprise considers its situation, according to different goals, interests, and other aspects of the enterprise, and chooses the largest way of disclosure for its interests. This kind of environmental accounting information disclosure is not conducive to the outside world's understanding of the enterprise's environmental information.

3.2. Lack of awareness of active disclosure of environmental accounting information

Due to the fundamental purpose of the enterprise existence is for the sake of profit, it also determines the enterprise will be selective in environmental accounting information disclosure, to help enterprises to profit, to promote the image of enterprise's external environment information, the enterprise has a strong initiative to disclose will, over the enterprise, or damage the environment information of the enterprise image. Enterprise is inclined to withhold.

In recent years, more and more domestic enterprises have released environmental accounting information, which indicates that the environmental awareness of enterprises is increasing year by year. The reason is mainly that the environmental information disclosure policy issued by relevant departments stipulates that heavy polluting enterprises need to disclose their environmental accounting information and enterprises need to disclose environmental accounting information to meet the requirements of regulatory authorities. In this environment, the environmental accounting information disclosed by most enterprises is relatively limited, which is often the disclosure of some good information for enterprises or the content required by the regulatory authorities to be disclosed, such as environmental protection concepts, emergency plans for environmental emergencies, environmental self-testing scheme, etc. This will also lead to incomplete information disclosure, which will not allow data users to obtain an accurate judgment, and reduce the reliability of disclosed information to a greater extent.

3.3. Lack of quantitative disclosure of environmental information

As can be seen from Table 3, the environmental accounting information disclosure of the brewing industry can be divided into qualitative disclosure and quantitative disclosure. Qualitative disclosure refers to the use of words to disclose the environmental accounting information of enterprises, such as environmental protection concepts, emergency plans for environmental emergencies, etc., while quantitative disclosure is based on data, and environmental accounting information is presented in the form of data. According to the statistics in Table 3, the information disclosure of the brewing industry, no matter in the annual report, social responsibility report, or ESG report, the environmental accounting information disclosure is based on text, and lack data support. Such disclosure methods cannot enable enterprises to accurately and completely convey information, and information users cannot accurately grasp the various environmental activities of enterprises. For example, for brewing enterprises, the

disclosure of quantitative information such as the utilization of waste distiller's lees and the disposal of waste distiller's lees is less, and information users cannot accurately grasp the benefits and costs brought by the reuse of waste distiller's lees, which cannot provide an accurate reference for further environmental activities of enterprises.

3.4. Lack of professional talents in environmental accounting

Environmental accounting information disclosure is a comprehensive discipline involving many disciplines. Because China's environmental accounting started late, obviously lags behind other developed countries, which leads to less professional talent in China. Although accounting professionals in China have strong professional knowledge of accounting, they are rarely involved in the disclosure of environmental accounting information. At present, there are more and more researchers began to study the work of environmental accounting, but most colleges and universities have not set up related majors, related students can not learn to master the relevant knowledge in school, resulting in work can not quickly adapt to the work of environmental accounting.

4. Suggestions and measures to improve the disclosure of environmental accounting information in the Chinese brewing industry

4.1. Improve the disclosure standards of environmental accounting information

The method of environmental accounting disclosure should be unified, the transition to more professional environmental reporting should be made, the relevant legal system should be improved, a reasonable platform should be established for the use of relevant enterprises, and the mandatory features of the law should be used to standardize environmental accounting information disclosure. At the same time, the disclosure content of environmental accounting should also have accurate requirements. The Ministry of Ecology and Environment, PRC issued on January 4, 2022 the "Standards for the Format of Enterprise Environmental Information Disclosure according to Law" as the platform, the information required to be disclosed by enterprises is subdivided into various indicators, and enterprises are required to disclose in accordance with the requirements. Relevant regulatory authorities should also strengthen the enterprise environment accounting information disclosure supervision, because companies have fickle kinds, which is likely to be conducive to enterprise information omission, for there is no standard disclosure behavior of enterprises, the relevant regulatory authorities should give corresponding punishment, in the national government level for relevant enterprises to increase pressure to encourage its focus on environmental accounting information disclosure problem.

4.2. Improve the awareness of enterprises to proactively disclose environmental information

The downturn in the brewing industry continues due to the impact of the pandemic and the introduction of restrictions on consumption and alcohol prohibition. At the same time, as one of the heavily polluting industries, its development has been affected to some extent by the tightening of national environmental protection policies in recent years. If enterprises want to develop for a long time, they must pay attention to environmental protection, purchase environmental protection equipment, reduce pollution emissions, enhance their environmental awareness, etc. Make the enterprise high-level truly realize that environmental accounting information disclosure can shape a good image of the enterprise in society, improve the value of the enterprise, contribute to the long-term development of the enterprise and generate internal power to promote the enterprise to actively disclose environmental accounting information^[3]. At the same time, the relevant regulatory authorities should also guide enterprises to carry out environmental protection publicity and education, and improve the initiative of enterprises to carry out environmental accounting information disclosure.

4.3. Improve the proportion of enterprises' quantitative disclosure

Textual disclosure, for quantifiable environmental indicators, such as brewing waste treatment, brewing pollutants types and quantities, environmental protection facilities construction, relevant departments clear enterprises must carry out quantitative disclosure of the project, require enterprises to carry out quantitative disclosure. This way of disclosure, so that the information users can more accurately understand whether the enterprise's environmental protection work is performed in place,

but also can be more advanced to understand the impact of environmental protection work on the enterprise's profitability, development, and other aspects, to make the right decision for the user. Finally the unified way is to let the environment accounting information disclosure reflects the importance of its own, rather than become a part of the annual report, overall, promote environmental accounting information disclosure of the quantitative can more detailed disclosure of enterprise environment accounting information, to facilitate the unified management of the use of the information users and regulators.

4.4. Attach importance to the cultivation of professional talents

Colleges and universities should keep up with the pace of The Times, not limited to the training of accounting talents, with the development of The Times, environmental accounting information is increasingly important, and the relevant colleges and universities should integrate their grasp of the resources, set up a professional environmental accounting, training personnel with professional knowledge of environmental accounting. At the same time, relevant enterprises should also stand on their realistic perspective of accounting personnel into environmental accounting information disclosure knowledge training, to promote the mastery of professional knowledge of enterprise accounting practitioners and the overall quality of enterprise accounting industry personnel.

5. Conclusions

Through analysis, this article discovered that issues with environmental accounting information disclosure, such as a lack of unified disclosure standards, enterprises' lack of active awareness of environmental accounting information disclosure, a lack of quantitative environmental information disclosure, and issues with a lack of environmental accounting professional talent, exist in the liquor-making industry in China. At the same time, it causes The Times' overall environment and business comprehension of environmental accounting information to crash. The idea is that by raising the standards for environmental accounting information disclosure, increasing business awareness of the need to actively disclose environmental information, increasing the proportion of quantitative disclosure made by businesses, and focusing on the development of professional talent, the quality of environmental accounting information disclosure of listed enterprises in the brewing industry can be fundamentally improved. Government, businesses, and society must all work together to advance environmental accounting disclosure, and their combined efforts may create an environment that is conducive to the growth of environmental accounting disclosure for listed organizations.

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