

The Study on the Improving the Efficiency of Corporate Environmental Responsibility Based on Ecological Civilization Construction

Wanting Li ¹, Wei Zhang ^{2,*}

¹ Financial department, Changsha Normal University, Hunan Changsha, China

² School of Economics and Trade, Nanchang Institute of Technology, Jiangxi Nanchang, China

* Corresponding author: Wei Zhang

Abstract: The relationship between ecological civilization construction and the efficiency of corporate environmental responsibility are positively correlated, also cook and rice. Corporate environmental responsibility (CER) means that the transform the role of business entity that is economic value orientation to the role of corporate citizen that is ecological value orientation. The corporations should promote the efficiency of CER from angles such as positioning among businesses (i.e. industry chain positioning) and positioning internal business (i.e. value chain positioning). In other words, on the one hand of positioning among businesses, the corporations should positioning the positive-sum industry, as well as the positive-sum industry has the high (or highest) efficiency of CER, and avoid positioning the negative-sum industry, which has the negative efficiency of CER. On the other hand of positioning internal businesses, the corporations should positioning strengthen the ecological value chain, so that the efficiency of CER in the corporation becoming the high (or highest) efficiency of CER in the internal industry. The improving the efficiency of corporate environmental responsibility is beneficial to the ecological civilization construction goals such as ecological power, "became more happiness" etc. coming true.

Keywords: ecological civilization construction; ecological value; the efficiency of corporate environmental responsibility; corporate citizen

1. Introduction

According to published international research data, air pollution has exceeded the self-cleaning capacity of the earth by 2-3 times, and the gap tends to widen, the ecological environment has been close to the bottom line of the earth's ability to withstand [1]. Pollution control cannot rely on "wind blowing", still less should one be satisfied with temporarily reaching the air quality index in one corner of a city while ignoring Ecological Value. In the practice of market economy, the construction of material civilization, such as the development of productive forces, the enhancement of comprehensive

national strength and the improvement of people's living standard, is unfavorable to the harmonious coexistence of man and nature. Therefore, it is necessary to continue to maintain the positive evolutionary role of enterprises in the progress of material civilization, and at the same time, to realize ecological civilization, blue sky and clean water by improving the efficiency and motivation of Corporate Environmental Responsibility (CER). The negative evolutionary effect of enterprises on ecological civilization will be transformed into positive evolutionary effect to the greatest extent.

2. Efficiency of Ecological Civilization Construction and Corporate Environmental Responsibility

2.1. Enterprise Legal Person and Corporate Citizen

2.1.1. Business entity

A Business Entity refers to an economic organization that independently bears civil liabilities and engages in profit-making production and business activities. The positioning of business entity is the economic person under the legal framework. The registered organization type of a business entity is a profit organization. Therefore, the maximization of corporate value (also known as economic value or corporate profit) is the natural mission and essential goal of a business entity. The concept and behavior of business entity in pursuit of enterprise value maximization, on the one hand, has a positive externality to promote the progress of material and spiritual civilization; on the other hand, there is a negative externality (economic actions that harm others or society) to pollute the environment.

2.1.2. Corporate citizen

Corporate Citizen refers to an economic organization that undertakes civil, social and moral responsibilities independently and engages in profit-making production and business activities. The civil liability of corporate citizens is the same as that of corporate legal persons. The social responsibility and moral responsibility of corporate citizens are mainly used to make up for the external corresponding responsibilities of corporate legal persons, specifically including the legal responsibility and moral responsibility in charitable responsibility and the legal

responsibility and moral responsibility in environmental responsibility. Corporate citizen is defined as an economic person under the legal framework and a social person under the moral framework. Corporate citizens, as economic and social people, have dual missions. Their code of conduct is not only to pursue the maximization of corporate value, but also to maximize social value (material civilization and spiritual civilization) and ecological value (ecological civilization). First of all, enterprise citizen is enterprise legal person and has the positive externality of enterprise legal person. At the same time, corporate citizens are also social people, so they should avoid negative externalities.

2.2. Ecological Value and Dissipation Value

2.2.1. Ecological value

Ecological value refers to the economic judgment, ethical judgment and system function judgment of the human subject on the object of ecological environment, including the economic value, ethical value and functional value of ecology. The ethical value and functional value of ecology are also called environmental value. Therefore, ecological value equals the sum of economic value and environmental value [2]. Take the ecological value of trees as an example, including the economic value of trees' flowers, fruits and wood, the ethical value of trees' life and harmonious coexistence with the environment, the functional value of producing oxygen, conserving water, providing breeding places for animals and so on. In the practice of market economy, we only pay attention to the explicit economic value, but ignore the implicit environmental value.

2.2.2. Dissipative value

Dissipative Value comes from the concept of entropy (the quotient of unusable thermal energy divided by temperature) in Dissipativity Structure Theory. In this paper, dissipative value refers to the unutilized part of value in the process of the source and direction of enterprise profit (net profit). For example, the profit of polluting industry comes from the loss of environmental value, and there is dissipation value from the perspective of environmental value [3]. Generally speaking, the dissipative value from the perspective of CER refers to the efficiency loss that is not converted into ecological value in the process of the source and direction of enterprise profits.

2.3. Corporate Environmental Responsibility and Efficiency of Environmental Responsibility

2.3.1. Corporate environmental responsibility

Corporate environmental responsibility ecosystem that is social responsibility (including clean air, pure water, livable ecology, energy conservation and emissions reduction and other responsibility content), refers to the enterprises in the pursuit of economic value maximization and abide by the laws and regulations (i.e. to assume the corresponding obligations of business entity of economic responsibility and legal liability) at the same time,

environmental value maximization should be considered, that is, to fulfill the social responsibility of protecting the ecological environment, saving natural resources and safeguarding the environmental public interests. CER requires that ecological value, rather than economic value maximization, be the reason for a firm's existence.

Corporate citizens undertake CER in order to make up for the negative externalities of business entity. The mandatory compensatory negative externalities constitute the legal responsibility part of CER, while the voluntary compensatory negative externalities constitute the moral responsibility part of CER. CER based on ecological civilization includes mandatory legal responsibility to prohibit damage to ecological value and voluntary moral responsibility to guide ecological value.

2.3.2. Efficiency of corporate environmental responsibility

The efficiency of corporate environmental responsibility (CER efficiency) includes the efficiency of business entity responsibility and corporate citizenship responsibility. The efficiency of CER depends on whether the source of the enterprise's profits is environmental damage or environmental improvement, and whether the enterprise's profits are used to damage or improve the environment.

(1) The efficiency of corporate environmental responsibility corresponding to corporate profit sources

In the process of pursuing profit maximization, enterprises choose business such as organic agriculture and greening industry, or business behaviors such as energy saving technology and green marketing. Due to the existence of positive externalities, CER has high efficiency. On the contrary, if the business choice or operation behavior corresponding to the enterprise's profit source has negative externality, the CER efficiency is low.

The CER efficiency corresponding to enterprise profit sources includes CER economic efficiency and CER ecological efficiency (the sum of economic efficiency and environmental efficiency). The economic efficiency of CER refers to the enterprise value (enterprise profit) undertaken by a firm and the corresponding rate of return (enterprise value/economic input) of CER. The higher the ratio is, the higher the efficiency will be. CER ecological efficiency refers to the ecological value (the sum of enterprise value and environmental value) undertaken by an enterprise and the corresponding return rate (ecological value/economic input) of CER. When the ecological value is positive, the higher the ratio is, the higher the efficiency is [4]. CER economic efficiency means that enterprise value takes precedence when there is conflict between enterprise value and ecological value. The ecological efficiency of CER means that the ecological value takes precedence when the enterprise value conflicts with the ecological value. CER requires that the mission of the enterprise be ecological value rather than enterprise value. Therefore, this paper focuses on the ecological efficiency of CER (the following refers to the ecological efficiency of CER).

(2) *The efficiency of corporate environmental responsibility corresponding to corporate profit direction*

The source of enterprise profit is directly related to CER efficiency, while the direction of enterprise profit is indirectly related to CER efficiency. There are two directions of enterprise profit: one is the consumption of natural person, the other is the expansion of reproduction. After enterprise profits are converted into consumption by natural persons, the relationship between consumption by natural persons and ecological environment is not directly related to CER efficiency of enterprise profits. There is a direct relationship between the consumption of natural persons and the marketing link of enterprise's profit source, so it is the CER efficiency corresponding to enterprise's profit source. After the enterprise profits turn into expanded reproduction, the enterprise starts a new round of inter-industry positioning and intra-industry positioning, which is the CER efficiency corresponding to the enterprise profit sources. Therefore, the CER efficiency corresponding to the enterprise's profit whereabouts need not be described. The following paragraphs will focus on the CER efficiency corresponding to enterprise profit sources.

2.4. Efficiency of Ecological Civilization Construction and Corporate Environmental Responsibility

2.4.1. *Ecological civilization and ecological civilization construction*

(1) *Ecological civilization*

Ecological Civilization refers to the sum of material and spiritual achievements made by mankind following the objective law of the harmonious development of man, nature and society. Ecological civilization is a form of civilization with the basic concepts of harmony, sound interaction, co-prosperity and co-existence between man and nature, between man and man, and between man and society.

From the perspective of the development stage of civilization, ecological civilization is the advanced stage of human civilization. So far, mankind has gone through three low-level stages: primitive civilization, agricultural civilization and industrial civilization, and is about to enter the stage of ecological civilization. From the realization form of civilization, ecological civilization is the fourth civilization of human civilization. Ecological civilization, material civilization, spiritual civilization and political civilization form "Four Civilizations" together to build the building of harmonious society. From the point of view of the value concept of civilization, ecological civilization is a civilization oriented by ecological value. Ecological civilization requires the transformation of the role of corporate legal person oriented by economic value to the role of corporate citizen oriented by ecological value.

(2) *Promoting ecological progress*

From the perspective of ideology, the construction of ecological civilization needs to establish the concept of ecological value. In order to build an ecological

civilization, we need to keep the ecological red line, the bottom line of ecological civilization. From the perspective of development strategy, the construction of ecological civilization needs to perfect the system of ecological value orientation. From the perspective of the realization mode of ecological civilization construction, ecological value orientation is needed to improve CER efficiency.

2.4.2. *Relationship between ecological civilization construction and corporate environmental responsibility efficiency*

(1) *Positive correlation*

From the perspective of the connotation of ecological civilization construction, the relationship between ecological civilization construction and CER efficiency is manifested in four aspects. First, they have the same value concept, and both ecological civilization construction and CER efficiency are ecological value concept. Second, they have the same ecological bottom line. Both ecological civilization construction and CER efficiency take the ecological red line as the bottom line. Third, they have the same strategies and methods. Both ecological civilization construction and CER efficiency should improve the related systems from the ecological value orientation. Fourth, the two are the relationship between the goal and the means. Ecological civilization construction is the goal, and CER efficiency is the realization way of ecological civilization construction.

Therefore, ecological civilization construction, as the goal of achieving ecological harmony and sustainable development, fully demonstrates the positive correlation between ecological civilization construction and CER efficiency, that is, the higher the CER efficiency, the more the ecological value orientation will be complied with, and the more conducive to the progress of ecological civilization construction. On the contrary, the more progress of ecological civilization construction, the more ecological value orientation will be complied with, which will promote the improvement of CER efficiency.

(2) *The relationship between cooking and rice*

Ecological civilization construction is rice (the fundamental purpose), while CER efficiency is rice (the necessary realization method). The relationship between ecological civilization construction and CER efficiency can be divided into four situations. First, the negative externality of slow economic growth on environmental pollution is less than the self-purification capacity of the earth. In this way, there is no CER efficiency problem, but it is the ecological harmony and ecological civilization corresponding to the low productivity level. Second, the negative externality of environmental pollution caused by high-speed economic growth is less than the self-cleaning ability of the earth. This can be achieved by improving CER efficiency in advance to maximize ecological value rather than economic value, which is ecological harmony and ecological civilization corresponding to high productivity level. Third, the negative externality of environmental pollution caused by

high-speed economic growth is 2-3 times greater than the self-cleaning capacity of the earth. In order to reduce and control environmental pollution and achieve ecological harmony and ecological civilization corresponding to high productivity level, it is necessary to pay several or even dozens of times of economic cost to improve CER efficiency. Fourth, the negative externality of environmental pollution caused by high-speed economic growth is more than 3 times of the self-purification capacity of the earth [5]. In order to reduce and control environmental pollution and achieve ecological harmony and ecological civilization corresponding to high productivity level, it is necessary to pay more than one hundred times the economic cost to improve CER efficiency, or be forced to use the economic cost of economic stagnation and economic regression to improve CER efficiency.

Therefore, in order to realize the ecological civilization construction corresponding to the high productivity level, we must need the rise of CER efficiency. If the CER efficiency is improved before the negative externality of economic growth on environmental pollution is less than the self-cleaning capacity of the earth, this is the optimal relationship between ecological civilization construction and CER efficiency. The earlier the CER efficiency is improved, the less the economic cost of ecological civilization construction will be. In other words, the earlier the CER efficiency is improved, the more conducive the ecological civilization construction corresponding to the high productivity level with low economic cost will be. The longer the CER efficiency is improved, the higher the economic cost of ecological civilization construction will be. Without improving CER efficiency, ecological civilization construction corresponding to high productivity levels will become making bricks without straw.

3. The Current Low Efficiency of Corporate Environmental Responsibility Is Not Conducive to the Construction of Ecological Civilization

In the current practice of market economy, whether it is business positioning or technological innovation, it is economic value rather than ecological value that drives enterprise behavior, and CER efficiency is very low. The current low efficiency of CER leads to unfavorable ecological civilization construction mainly in following two aspects.

3.1. Economic Value and Ecological Environment Evolve in the Opposite Direction

In 2020, 87 percent of China's 337 cities at and above the prefecture level had good days on average. From January to December in 2020, among the 168 key cities, Anyang, Shijiazhuang and Taiyuan were relatively poor in air quality. Cities such as Haikou, Lhasa and Zhoushan had relatively good air quality. The more urban agglomeration, the more developed the economic circle, such as the Beijing-Tianjin-Hebei region, the Yangtze River Delta and the Pearl River Delta, the worse the air quality. China's water resources are also polluted,

especially in urban areas more than in rural areas and economically developed areas more than in underdeveloped areas [6]. Pollution hates the poor and favours the rich. Economic value growth and ecological environment deterioration evolve in the opposite direction, so it is necessary to reflect on the defects of economic value orientation.

3.2. Economic Value Violates the Original Intention of Civilized Development

In 2020, haze pollution continues to be a problem in China. Among them, Xingtai, Baoding, Shijiazhuang, Handan, Hengshui, Dezhou and Heze all have an annual mean of PM_{2.5} higher than 100 micrograms per cubic meter, ranking TOP7 among cities with breathing difficulties. In China's water resources, surface water and groundwater are polluted to different degrees. Many cultivated lands are polluted by heavy metals, especially in the Yangtze River Delta. The problem of Marine pollution has still not been solved, and the water quality of the sea adjacent to the outlet cannot meet the environmental protection requirements of the marine functional areas in the area [7]. If economic growth and industrial civilization come at the expense of citizens' health and the harmonious coexistence between man and nature, they will not only pay a higher economic price in the future, but also violate the original intention of ecological civilization development.

4. Measures to Improve the Efficiency of Corporate Environmental Responsibility Based on Ecological Civilization Construction

4.1. Business Positioning and Ecological Value

Michael E. Porter (1996), a representative of the Positioning School, believes that business positioning (including inter-industry positioning and intra-industry positioning) can be analyzed in order to achieve sustainable competitive advantage (i.e. maximizing sustainable economic value) [8]. Therefore, the sustainable ecological value of enterprises can be maximized from the perspective of business positioning (inter-industry positioning and intra-industry positioning). Enterprise ecological value oriented business orientation can improve CER efficiency and promote ecological civilization construction.

4.1.1. Inter-business positioning

Inter-business positioning refers to the determination of the most valuable (economic value) business in many industries or many businesses. Differences in value between industries or businesses are called inter-industry differences. Industry positioning and camera choice corresponding. The idea of inter-industry positioning analysis is to carry out qualitative analysis of environment, mission and strength, and simultaneously carry out quantitative analysis of the value structure of the Industry Chain (referring to the sum of different business activities in the upstream and downstream industries), so as to find the most valuable business in the Industry Chain. In essence, inter-industry positioning is

industrial chain positioning, which is mainly used to analyze the business choices of enterprises.

4.1.2. Industry positioning

Industry positioning refers to becoming the most valuable (economic value) enterprise within the industry or business. Differences in the value of different enterprises in the same industry or business are called industry differences. Positioning in the industry corresponds to having no choice. The idea of industry positioning analysis is to conduct single or comprehensive capability analysis on the four links of enterprise value chain (which refers to the enterprise interior various activities to create enterprise value of the collection development): research and development, production, sales and brand (only discuss the four main Value Chain link, this paper does not discuss the auxiliary Value Chain of financial, human resources, the two links). Then through each link of the value chain to complement or develop strengths and circumvent weaknesses, under the condition of business unchanged to become the most valuable enterprise. In essence, industry positioning is value chain positioning, which is mainly used to analyze enterprises to strengthen their business.

4.1.3. Business positioning and ecological value

Environmental value chain refers to the collection of all kinds of activities that create environmental value within an enterprise. Ecological value chain refers to the collection of all kinds of activities that create ecological value in an enterprise. Since ecological value is equal to the sum of economic value and environmental value, ecological value chain is equal to the sum of enterprise value chain and environmental value chain. Enterprise value chain means that enterprises take economic value as the basis of inter-industry positioning and intra-industry positioning, and enterprises realize the maximum of economic value. Ecological value chain means that enterprises take ecological value as the basis of inter-industry positioning and intra-industry positioning, and enterprises realize the maximum of ecological value.

4.2. The Relationship between Ecological Value, Inter-industry Positioning and Corporate Environmental Responsibility Efficiency

Inter-industry orientation firstly determines the direction of CER efficiency, namely, positive efficiency (the ecological value is positive) or negative efficiency (the ecological value is negative). Secondly, determine the high efficiency or low efficiency when it is the positive efficiency.

4.2.1. Negative and positive industries

The positive or negative of CER efficiency depends on the positive or negative of the ecological value of the Industry. Negative-sum industry corresponds to the negative efficiency of CER, and generally refers to the industry whose sum of economic value and environmental value is negative due to negative

externalities. This paper refers to the industries whose environmental value and ecological value are both negative, that is, the negative externalities of the industry cause the environmental value to be negative, and the sum of environmental value and corporate profit to be negative, excluding the industries whose positive externalities cause the environmental value to be positive, and the sum of environmental value and corporate profit to be negative. Corresponding to the positive efficiency of CER, positive-sum industry generally refers to the industry whose sum of economic value and environmental value is positive. This paper refers to the industries whose environmental value or ecological value is positive, that is, the industries whose environmental value is positive due to the positive externalities of the industry or the sum of environmental value and corporate profits is positive [9].

4.2.2. Negative efficiency of negative-sum industry and corporate environmental responsibility

Negative-sum industries destroy the ecological environment in the production or consumption links, and both environmental value and ecological value are negative. When the inter-industry positioning of enterprises are positioned as negative-sum industries, CER is negative efficiency. In the practice of inter-industry positioning, the conditions of legal negative-sum industry change dynamically. In this paper, the negative-sum industry is defined as : (1) Negative-sum industry due to technology or industry standard, such as some chemical, smelting and other industries; (2) Negative-sum industry for customer health reasons, such as some GMF, tobacco and other industries; (3) Negative-sum industry of consumption ethics, such as some online games, fireworks and other industries; (4) Negative-sum industry of legal standard reasons, such as hacker, firearms and other industries. With the expansion of enterprise scale or customer scale, the ecological value of negative and industry decreases, and CER efficiency tends to be negative. CER negative efficiency not only affects contemporary well-being, but also needs to pay many times the economic value in order to govern the environment in the future [10].

4.2.3. Positive efficiency of positive-sum industries and corporate environmental responsibility

There are two kinds of positive-sum industries. One is the industry whose ecological value is positive, that is, the sum of environmental value and enterprise profit is positive. Second, in the production or consumption link is conducive to the ecological environment, the environmental value of the industry is positive. In practice, industries with positive environmental value, negative corporate profits and negative sum of environmental value and corporate profits, such as ecological forestry and greening industries, are classified as positive-sum industries even if the corporate profits are negative.

Industries are positioned as positive-sum industries. Under the same conditions of economic inputs,

environmental pollution, resource consumption, and dissipated value (i.e. efficiency loss when economic inputs are not converted into ecological values) will reduce ecological output and determine the efficiency of CER. Specifically, it can be divided into three situations:

- (1) The degree of environmental pollution and the level of CER efficiency. For example, compared with the smelting industry, the degree of environmental pollution in agriculture and forestry is lower, so the CER efficiency is higher;
- (2) The consumption of resources and the efficiency of CER. For example, compared with manufacturing industry, the software development industry consumes less resources and the CER efficiency is higher;
- (3) The magnitude of dissipation value and the efficiency of CER. For example, compared with the non-monopoly industry and the monopoly industry, the dissipation value is smaller and the efficiency of CER is higher.

4.3. Relationship between Ecological Value, Industry Positioning and Corporate Environmental Responsibility Efficiency

The industry positioning determines the efficiency of CER, that is, the high efficiency or low efficiency in the case of positive efficiency.

4.3.1. *The efficiency of R&D and corporate environmental responsibility*

Strengthening the research and development of the value chain is conducive to promoting the technological progress of enterprises and accelerating product innovation. If the ecological value rather than economic value can be achieved in the industry, the efficiency of CER can be improved. In practice, if basic, permeable, reactive and other R&D functional strategies are formulated based on the ecological value of competitors rather than the economic value, CER is more efficient [11].

4.3.2. *Production link and corporate environmental responsibility efficiency*

Strengthening the production link of the value chain is conducive to the optimization of the design, planning and control of the operating system of the product or service, and can improve the efficiency of CER if the ecological value of the industry is achieved instead of the economic value. In practice, if production capacity strategy, production quality strategy, procurement strategy and other production function strategies are formulated with the ecological value of competitors rather than the economic value as the reference, CER has higher efficiency.

4.3.3. *Sales link and corporate environmental responsibility efficiency*

Strengthening the sales link of the value chain is conducive to the design of the sales system, logistics distribution and after-sales service optimization. If the ecological value of the industry can be realized instead of the economic value, the efficiency of CER can be

improved. In the practice of industry positioning in the sales link, if sales strategy, logistics distribution strategy, after-sales service strategy and other sales function strategies are formulated with the ecological value of competitors rather than the economic value as the reference, the CER has higher efficiency.

4.3.4. *Brand link and corporate environmental responsibility efficiency*

Strengthening the brand link of the value chain is conducive to the efficiency of the whole process of enterprise brand creation activities and dissipated value. If the ecological value in the industry can be realized instead of economic value, the efficiency of CER can be improved. In the practice of brand positioning in the industry, if brand functional strategies such as brand segmentation, brand selection, market entry and brand portfolio are formulated with the ecological value of competitors rather than the economic value as the reference, CER is more efficient [12].

4.4. Ecological Value, Business Orientation and Corporate Environmental Responsibility Efficiency Countermeasures

The evolution of ecological value orientation and ecological environment in the same direction is an effective measure to build ecological civilization, become a big country with ecological value, realize the dream of blue sky and green water, and improve the efficiency of CER. In the face of the difference between economic value and ecological value and the ecological environment bottleneck of economic growth, the government should take blue sky and green water as the dream, take ecological value as the mission, and the government functions, political performance evaluation and investment promotion need to change from the maximization of economic value to the maximization of ecological value. Only when ecological value and economic value evolve in the same direction, that is, ecological value and economic value are positively correlated, economic value orientation will give way to ecological value orientation, and enterprise law personnel will change their roles to corporate citizens, and then implement behaviors to improve CER efficiency.

4.4.1. *Inter-industry positioning measures to improve corporate environmental responsibility efficiency*

(1) *Release a catalogue of industries with ecological value*

On the basis of the existing *Guiding Catalogue for Industrial Structure Adjustment (2013 Revision)*, the *Catalogue of Industrial Ecological Value* is published. According to the level of their ecological value, it divides industries into negative-sum industries (industries with negative externalities resulting in negative ecological value, such as chemical and smelting industries caused by technical standards, etc.) 1, 2 or more categories, positive-sum industry 1, 2 or more categories; According to the level of ecological value, different behaviors in R&D,

production and marketing of the enterprise value chain can be classified into R&D 1, 2 or more, production 1, 2 or more, and marketing 1, 2 or more.

The ecological value of different industries and different value chain behaviors of the same industry are defined through *the Catalogue of Industrial Ecological Value*, and the ecological value maximization is used to guide enterprises' industrial (such as positive-sum industry) decision-making and value chain behavior (such as low-carbon technology innovation, clean production, green marketing, etc.) decision-making. According to the dynamic perfection degree of *the Catalogue of Industrial Ecological Value*, the flexible guidance has evolved into the rigid specification.

(2) Promoting ecological values

It is urgent for enterprises to change the value concept and method of inter-industry positioning. It is necessary to analyze inter-industry positioning from the perspective of economic value to ecological value, and give priority to positive-sum industries and avoid negative-sum industries when making decisions. In positive-sum industry, we will give priority to low-carbon, environmental protection and green industries with high ecological value. At the same time, non-governmental organizations and other non-governmental forces will be mobilized to guide the concept of green consumption and ecological value positioning among industries.

There are two directions to promote the concept of ecological value. Various media, such as TV, Internet, newspapers and street signs, regularly launch popular science programs or columns on ecological value, popularize which industries have high or low ecological value, which value chain behaviors have high or low ecological value, publicize the most beautiful ecological enterprises and the ranking of ecological value, and make the concept of ecological value known to everyone. Second, ecological value popular science education. In kindergartens, primary schools, middle schools, universities and other stages of education, courses or chapters of popular science of ecological value are provided to educate the ecological industry chain and ecological value chain, so that the concept of ecological value can be deeply rooted in people's hearts. When the public including customers have the idea of ecological value, the demand for ecological value will drive enterprises to implement the behavior of ecological value maximization.

(3) Improve the legal system of ecological value

On the basis of the catalogue of ecological value industries, it is necessary to improve the green tax law system such as environmental tax and green consumption tax as soon as possible, and to support enterprises in positive-sum industry positioning with high ecological value such as green food, green building materials and green energy, and to restrain negative and industrial positioning with regulations. The transfer of polluting industries should not be encouraged, but the transfer of polluted industries should be strictly prevented. The

dissipative value of government monopoly, regional monopoly and technical standard monopoly industries should be deeply reformed to improve CER efficiency. In addition, mistakes should be learned from. Take the wind power industry as an example, the U.S. Wind Energy Production Tax Credit Act (PTC) is flawed in terms of policy continuity, so the U.S. wind power industry is trapped in a "boom-bust" cycle. Continuous policy support should be implemented for wind power and other industries [13].

Based on the ecological value law system, the ecological value behavior of enterprises can be strengthened from two directions. First, administrative adjustment of value difference. The government uses ecological tax, ecological subsidy, ecological fine, ecological fund and other ways to adjust the difference between economic value and ecological value, especially to compensate the value difference of industrial chain and value chain behaviors that enterprises are reluctant to implement because of high ecological value and low economic value. The second is the rigid constraint of policies and regulations. The government provides rigid regulations on the behaviors that are not conducive to ecological value in the industrial chain and value chain of enterprises by means of environmental regulations, pollution discharge permit, ecological information disclosure, low-carbon standard certification, etc.

4.4.2. Industry positioning countermeasures to improve corporate environmental responsibility efficiency

(1) Improve the efficiency of corporate environmental responsibility in research and development

The research and development process determines the efficiency of CER from the technical source. Take the photovoltaic industry as an example, solar energy is a green energy, but it takes 250,000 KWH to produce a ton of solar cells, and the silicon tetrachloride produced in the production process cannot be processed by the current technology. The production of carbon black, for example, is energy-intensive, but SidRichardson Carbon saves 90,000 tons of coal and 125 million gallons of water a year by using thermoelectric waste gas collection and gas-cooled condensation, making it truly environmentally friendly. Therefore, enterprises should actively develop a green technology system consisting of "light green technology" for pollution reduction and "dark green technology" for waste disposal, so as to improve the efficiency of CER from the technology source [14].

(2) Improve the efficiency of corporate environmental responsibility in the production process

To improve the efficiency of enterprise environmental responsibility, we can learn from the concept of clean production, that is, to prevent or reduce pollution at the production source, to transform the existing production equipment with high energy consumption and high pollution, and to improve CER efficiency in the whole production process and product cycle through the reduction and recycling of pollutant sources. In addition, enterprises should take ecological value rather than

economic value as the basis for whether to accept manufacturing outsourcing orders.

(3) Improve the efficiency of corporate environmental responsibility in the sales link

We can also learn from the online direct selling model of Dell, Procter & Gamble and other companies, and actively use the e-commerce platform in the sales link to establish short and wide channels, reduce the consumption of channel resources, and promote the evolution of traditional long channel sales into online direct selling. Enterprises need from the choice of green transportation means, the establishment of green warehouse, to the formulation and implementation of green handling, transportation, storage, management methods, to realize the green logistics activities [15].

(4) Improve the Efficiency of Corporate Environmental Responsibility in the Brand Link

In order to improve efficiency, it is necessary to improve ISO14001 and other environmental labeling low carbon standard system as soon as possible, and actively promote the examination and evaluation of environmental labeling low carbon product certification of enterprise products on the basis of voluntary application of enterprises. The government and the private sector should work together to guide enterprises to link low-carbon certification and CER information disclosure with CER brand image. To avoid the lack of reference, enterprises should advocate customer rational value (price, quality, service and other elements corresponding to the use value) in the brand link, rather than customer emotional value (prestige, fashion, packaging and other elements corresponding to the virtual value). Based on ecological value, enterprises should reduce the dissipative value and improve the efficiency of CER by reducing advertising costs and customer consumption costs.

5. Conclusion

Zhuangzi, Shanmu believes that "heaven and man are one". *Xunzi's Treatise on Heaven* holds that "all things live in harmony and are nurtured in harmony." In the *Book of Rites, the Monthly Order*, it sets out in detail the month limits for fishing, hunting and logging. These classical ecological wisdom all express the common meaning of ecological harmony. Confucianism interprets "kernel" (such as peanut kernels, walnut kernels) as "business" (living seeds), and evolves from "business" to "to do business". This vividly shows that enterprises (business entity, economic value orientation, and the pursuit of economic value maximization) need to follow the original meaning of "business" (corporate citizens, ecological value orientation, and the pursuit of ecological value maximization) and return to the source of "benevolence" (life, living beings, symbiosis), so as to realize ecological harmony and ecological civilization. In pursuit of economic value maximization, business entity have achieved economic growth goals such as becoming an economic power and "becoming rich", but there are negative externalities such as environmental pollution

exceeding the self-purification capacity of the earth, which pose a severe threat to ecological civilization. It is urgent for business entity to transform into corporate citizens. Relying on corporate citizens to pursue the maximization of ecological value and make use of the positive externalities of ecological value to improve CER efficiency, we can surely achieve the goals of ecological civilization construction such as becoming an ecological country.

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