

A New Perspective about Corporate Environmental Management Self-organizing Development

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ABSTRACT: *When wanting to end genesis of environmental protection mechanism the enterprises had to create environmental management self-organization. Creating environmental management self-organization needs internal and external driving factors. In addition to government regulation external driving factors also include market risk management pressure, investor pressure, consumer and positive environmentalist pressure, attracting and retaining excellent employee pressure, etc; internal (driving factors mainly include the enterprise culture having the connotations of sustainable development, interactive orderly enterprise organizational structure and management system enterprise innovation mechanism of technology progress and innovation etc. At present some high-performance enterprises in developed countries who are implementing some self-organizing environmental management practices have obtained win-win situation of economic and environmental benefits. To actively create corporate environmental management self-organization the enterprises need to implement series of strategies to stimulate internal and external driving factors. These strategies specifically include: the first is that enterprises must actively innovate regulation systems and tools, particularly need attention to use of information tools; the second is that enterprises should actively shape the concept of sustainable development and build and implement sustainable development strategies; the third is that enterprises should further improve and perfect EMSs and widely use ISO14000; the fourth is that enterprises should intensify R&D and encourage enterprises to develop self-organizing environmental management depending on technological progress and innovation.*

KEY WORDS: *government environmental regulation; corporate environmental management; self-organization sustainable development*

I. INTRODUCTION

Nowadays, more and more from the different channels of the pressure forced the enterprises engaged in environmental management, innovative management system, to improve the environmental performance, external effects of internalization of environmental problems. Henriques and other scholars from the perspective of government regulation, the governmental supervision and enforcement important influence on the enterprise choice. Lippke economists emphasize policy tools to improve the realization of the goal of elasticity, the use of market incentives to preference tool. According to Cashore, the government should make more choices no longer, and the more efficient interest groups to decide. Some scholars have pointed out that the situation in developed countries, the loosely regulated seems to generally higher compliance rate and better environmental performance is difficult to match, i.e., the existence of the so-called "Hareton neck theory" (Harrington paradox). The majority of scholars believe that the reasons for the super standard, enterprise implementation of environmental standards, it is difficult to use all these external environmental pressure to explain. Indeed, the

research of enterprise green from organizational sociology angle results show that only using the material incentive can not reveal other important explanatory variables. Aiora and Cason discussed the enterprise green image show consumer desire. Anion, Dellas and Khanna from the angle of empirical research, found that the reduction of regulation and market oriented pressure on pests have no direct effect, but indirectly encouraging effect on enterprise management system change and environment related. Florida through the research found that organizational resources (especially enterprise scale, enterprise leaders promise etc.), environmental resources (such as quantity, environment of employee tenure and experience), the use of enterprises on environmental performance monitoring system and processing, and used in manufacturing factories advanced manufacturing methods, has a prominent role of the enterprise environmental performance improvement.

Langeweg believes that, despite the environmental protection technical potential is very large, but if we want to truly get to tap this potential, the investment in social system and people is a must. When the government constantly explore new control system with the tool, the enterprise also unceasingly carrying on innovation of various kinds of organization system and environmental management. The author thinks, not environmental protection system of the enterprise from the outside to build, but by enterprise systems rely on environmental management innovation, self-development, born in enterprises can truly, to improve the environmental performance of enterprises sustained and stable. Sound and perfect the enterprise organization structure is the key factor in the face of the incentive and opportunity to respond effectively, advanced form and organizational innovation is a self - organization. Enterprise management system self organization also has good dynamic performance and good balance of properties, the self organization level and the efficiency of organization and activity is proportional to. This paper attempts to use the theory of self-organization, to explore the driving factors from inside and outside enterprise organization created the environmental management, and briefly sums up the current developed country enterprise self organization environmental management of the actual situation, and finally puts forward specific strategies of cultivating enterprise self organization of environmental management.

II. CORPORATE ENVIRONMENTAL MANAGEMENT SELF-DRIVING FACTORS OF ORGANIZATION CONSTRUCTION

The self-organization is that under certain conditions, due to the interaction of the system of sub system, make the system forming process has a certain function, structure, this process enables the system to achieve a more stable and ordered state. Directly imposed on the system in a variety of structure is not formed the system in the process of the outside, the outside world only by way of non-specific effect on the system. Self-organization behavior as a kind of process can be divided into four categories: one is composed of non-tissue to the orderly development process of the organization, or organization state low degree simple organization state by ordering to higher complex evolution, this is a process of self-creation -- autopoietic organization behavior; two is the system of organization levels unchanged under the condition that the process of organizational complexity relative growth, this process is the organization of the system volume expansion: self-expansion; three is the system did not change in the level of organization and complexity, just – self-maintenance process to maintain the system status; four is obtained by the system of material energy information below to maintain the existing system structure operation request, then the system will disintegrate, self-degradation. The four process is simple to describe the basic process of self-organizing self-circulation. For the problem of sustainable development of self-organization, a famous scholar Ai Gen in the foundation of modern system theory is put forward on the super cycle theory, in order to solve the system self-organization and self-circulation unsustainable predicament. Chinese scholars such as Hu Hao in the summary based on

self-organization theory and on the basis of system theory, put forward the new paradigm of "super system thinking", known as the super system theory. In the self-organization and self-evolution process, the drive by both external and internal. Obviously, in the self-organization since the beginning stage of creation process, internal information system is relatively small, the system evolution in the process of "he would" is relatively obvious, so this external drive a more prominent role. Enter since the expansion phase, internal information system significantly more, system evolution in the process of "self-determination" is more and more strong, the internal driving factors dominate.

1.1 corporate environmental management from external organizations create driving factors

Admittedly, government regulation is still one of the main external factors driving enterprises to strengthen environmental management. However, with the development and use more market-oriented tools, government regulation elasticity increases, and the progress of social civilization, other external enterprise environment management are also more and more driving factors. Environmental management for enterprises to create self-organizing facing these external driving factors or pressure motivation and drive.

The first is the external market risk management pressure. With the further development of the capital market, produce damage to the environment of enterprises will face significant financial risk. In the UK, the ethical risk when the enterprise faced with the society, environment, it will be notified of the British insurance association. In Australia, the introduction of environmental management system firstly, enterprises can now pay less than the interest rate of 1%, reduce 30% of the insurance premium, because the risk of the enterprise in the evaluation of bank and insurance company is very low, therefore, managers may try to protect their companies and their shareholders, to avoid the unfavorable reputation damage the financial consequences. External market forces may drive enterprises to the corporate behavior and development of responsible strong internal rules to manage their enterprise risk direction.

The second is the pressure of all kinds of investors. The enterprise may face social and environmental results from investors and their pressure management activities of the enterprise. Most institutional investors think, when there is a relationship between the investments and the society, the environment, to manage the related risk through effective self-management enterprises will have a higher rate of return on invested capital. Cowe based on a sample of 89 in the S & P 500 out of the analysis found, choose strictly following his global environmental standard enterprise the individual value is much higher than that of those who meet the legal standard low, the individual enterprise value. Not maintain strict standards of the enterprises facing the investment risk is more obvious in the 1984 India Bhopal chemical accident. In the event after the 5 trading days, the Union Carbide value of the assets losses of about 27.9% of the total market value. So, I hope the real investment return maximization of shareholders will have the incentive to make sure whether the object exists, the investment environment risk.

Third is actively consumers and environmentalists in the external pressure. Enterprise self management as a possible on direct reaction from consumer pressure. In the call and support of international and domestic NGO movement, consumers begin to poor social and environmental performance of enterprises to boycott. The majority of consumers, although not a positive moral agents, active in the environmentalists call, will take appropriate action. Haufler believes that the combination of positive environmentalists and consumer pressure, more effective for those who rely on the brand product sales enterprises.

It is in active consumers and environmentalists under the pressure of Shell and its European rival EP Ltd. each developed their own self environmental management system. The fourth is to retain and attract the best employees pressure. Corporate environmental reputation will have a significant effect also locked in the labor market. Having a poor reputation enterprise may find it in the organized labor market to recruit and retain good employees more difficult. Ienox think, no control of its reputation risk better companies will likely than those social and environmental responsibility of enterprises face higher labor costs. According to a study in the United States in 2003 employees found that almost half of the employees will be whether the employer social and environmental responsibility as the main consideration. For example, Shell believes that their commitment to sustainable development is an important factor influencing people join and stay, personal value, staff value and the value of enterprise alliance is a powerful motive for excellent graduates, especially against the reputation for poor business work.

1.2 environmental management of enterprises from the internal organization to create the driving factors

According to the environmental management of enterprises, and actively innovation research of environmental management, more is to carry on the discussion from the external driving factors, while the internal management of enterprises to actively environmental driving factors of the relative lack of. Chinese scholars Zhang Bing, Bi Jun and other empirical analysis by modeling the influence factors on the performance of corporate environmental management, the basic expression for:

$$EMP = f(A, R, C, M)$$

Where EMP denotes the enterprise environmental performance, A used to measure corporate ability or character; used to measure the control pressure; used to measure the C community or community pressure; M is used to measure the pressure from the market. In four independent variables, only A is the enterprise endogenous variables, the other a few are exogenous variables. Even if the A variable is simply with the economic strength of enterprise scale and enterprise as a typical feature of enterprise measure. John F. Tomer think, their ability to improve and internal enterprises actually driving factors of cultivated form is gradually through the elusive capital investment, enterprises are constantly evolution results, so it is difficult to grasp. Overall, corporate environmental management from the internal organization to create the driving factors should include at least the following factors:

First is the concept of sustainable development as the connotation of enterprise culture. The enterprise as a personal organization, there are social, political and economic nature. When the sustainable development has become the main melody in the society, some enterprises may be quickly accept the idea of sustainable development, and Its Cultivation in enterprise interior, constitutes one of the important contents of enterprise culture. The enterprise culture is the guide for action in all staff to guide enterprises in the drive, the concept of sustainable development, enterprises from top to bottom will consciously strengthen the corporate environmental management, ongoing environmental management innovation, care of the environment, improve the environment. With the idea of sustainable development is the connotation of enterprise culture to create will become the enterprise environmental management self-organizing strong internal driving force, to the ideological driven action, action to get results.

The second is the interaction and orderly business organization structure and management system. Institutional innovation and continuously optimize is the inner power of enterprise sustainable development. Interactive orderly organizational structure and management system is the basis of cultivating enterprise environmental management organization ability. According to the Johannes Fresner found that the empirical study, in the introduction of system of environmental management system, the innovation and optimization of the organizational structure and management system is the main reason to improve corporate environmental performance, its effect and even far more than the technology

changes in the role of. The formation of organizational structure and good management system, can we truly environmental policy and sustainable concept into main body of enterprise decision and action, drive enterprise self organization environment administration continues.

Third is the enterprise innovation mechanism of technology progress and innovation. As the self organization environmental management of the enterprise, it should be the goal is zero defect, zero inventory, zero emission. Only through increased research and development efforts, improve enterprise innovation mechanism of technology progress and innovation, to promote the enterprises to continuously improve the efficiency, self perfection, realize high quality, high efficiency and high environmental performance commitment. Potter assumes that strict environmental regulation is more likely to encourage enterprises to innovation, rather than inhibit innovation. In fact, stringent environmental regulation is not for all the enterprises will have the positive effect, only have the incentive effect for those with technical progress and innovation mechanism of enterprises will be good.

III. THE PRACTICE OF ENTERPRISE SELF ORGANIZATION OF ENVIRONMENTAL MANAGEMENT

The formation of enterprise environmental management since the organization is an evolving process, it need to improve organization management efficiency, enhance the ability of organization. Therefore, ongoing since the environmental management practice organization created for environmental management self organization is the key. At present, higher than the industry system of enterprise collection organization put forward the ecological development pattern, this is actually a kind of self organization development. To create eco industrial park is the primary mode of a kind of environmental management of self-organization, the model in the domestic application of if can further reduce the government of the brand, enhance the enthusiasm of independent participation of enterprises, so the environmental management self organization will produce greater demonstration effectiveness. At present, to reach the standard of environmental regulation and more and more enterprises, began to change from passive to active, in order to achieve the sustainable development as the goal, the practice of self organization environmental management. Calherine A and Ramus to corporate environmental standard & Poor's 500 strong in a good performance as the object of investigation, concentrated self organization environmental management practice them, and summarizes their present self practice of environmental management innovation organization mainly 13 categories (see Table 1). Through the introduction of these self organization environmental management innovation, these enterprises not only greatly improved environmental performance, but also obtained the good economic performance.

Tab.1 List of innovation practices about self-organizing environmental management

The practices of specific projects about self-organizing environmental management
1 writing enterprise innovation strategy and policy environment
2 specific goals for environmental performance improvement
The 3 publication of corporate environmental reporting and Sustainable Development Report
4 to construct and improve the environmental management system of enterprise
5 make the enterprises purchase policy environment
6 the formulation and implementation of corporate environmental training and education policy
7The implementation of the employees of the environmental accountability system
8 the implementation of life cycle assessment policy
9 with the idea of sustainable development to guide the practice of enterprise management
10The implementation of the fossil fuels reduction policy

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- 11 The implementation of the toxic chemicals less policy
 - 12 The implementation of the nonrenewable resources and products use less policy
 - 13 the implementation of corporate environmental standards strategy of global unity
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In addition, these enterprises to motivate their self organization environmental management innovation, arouse the enthusiasm of each employee environment innovation, has formulated the corresponding incentive mechanism of internal, Catherine - A and Ramus which can be classified into 6 categories (see Table 2). According to the empirical research on them, if the enterprise has the possibility of environmental policy, then employees for environmental innovation will be increased from 19% to 50%; when employees can get management environmental management information, the possibility of employees in environmental innovation will be increased from 28% to 62%.

Tab.2 List of management practices which support environmental initiatives by employees

The practices of specific projects about enterprises supporting employee environmental innovations
1 Management Reform: encourage new ideas of employees, the new test and learning behavior
2 ability: strong support for employee training and learning education activities
3 democratic communication: encourage employees to mutual exchange of ideas and comments suggestions
4: the enterprise important information dissemination of information sharing and employee, employee master consciousness cultivation
5 reward and recognition: the use of formal and informal incentives to recognize and strengthen the appropriate Employee behavior
6 goal and responsibility management: the use of quantitative and qualitative methods and share the performance target And responsibility

IV. THE CULTIVATION OF ENTERPRISE ENVIRONMENTAL MANAGEMENT SELF-ORGANIZATION STRATEGY

The cultivation of enterprise environmental management of self-organization, the need for external drive dual role factors and internal driving factors. According to Hamartia Sen mentioned in the classical literature "his rational fools": "through complete incentive to run an organization, to achieve one's goal, is actually quite work without hope"? The relationship between the evaluation of employer employee relations based on analogy seems to be used in environmental protection in the regulators and the regulated on the. Sen Then can also be expressed as "method of complete with incentive to protect the environment, is quite work without hope". Based on this, Sen argues that involve altruism stimulus of a series of corporate social responsibility self-commitment is a must. Therefore, as a human organization of the enterprise, its policymakers tend to be social ability, encourage, status, power, wealth and altruistic accidental inspired. The external incentive as the external drive has its role, but to truly realize the internalization of environmental protection mechanism, external to solve environmental problems, but also need to cultivate the enterprise's own environmental management self-organization.

3.1 to actively innovate regulation system and tools, the use of special attention should be paid to information tools

From the development trend of international environmental policy point of view, although the market oriented control system development is rapid, but in fact, according to the Eriksson analysis, thought that in the duopoly market, voluntary internalized the negative environmental externalities may be a promising substitute for public intervention, but in the end, the empirical results show that, the moderate idealism or cannot replace the environmental regulation. At present, the international environment control tend to be synthesized, enforcement tools, marketing tools, cooperation management and self-management exist at the same time and integration development. On the one hand, to innovation of control system of low environmental performance, full and effective use of environmental regulation pressure, promote its to move closer to the high environmental performance of enterprises, and ultimately create environmental management organization; on the other hand, should make full use of information tools, driving factors to mobilize other external pressure on enterprises, speeding up the walk on the road environmental management of self-organization.

3.2 To actively shape the corporate sustainable development concept, and build the implementation of sustainable development strategy

When the enterprise clearly through the enterprise culture and the policy will convey them to the concept of sustainable development for the employees, employees are more likely to engage in solving environmental problems, environmental management and technology innovation. From top to bottom to mobilize all levels of employees to actively carry out environmental innovation, requires the organization structure and management system and improve the sound can support and encourage employees to environmental innovation. Judging from the current situation, to build the implementation of sustainable development strategy, first of all, need to the concept of sustainable development will be really instill into enterprise management mind, let them really accept the concept of sustainable development. Has a direct positive effect on management behavior on employee environmental innovation intention. Secondly, to really foster participatory democracy style and construction of enterprise internal and external information interactive channel for good. According to the research of Catherine A. Ramus, participation in the information interactive democratic style and good enterprise, can greatly improve the possibility of employees in environmental innovation.

3.3 to further improve and perfect the environmental management system (EMSs), extensive application of management system of international environmental standards (E014000) certification mechanism

The establishment of environmental management system in the enterprise, at present has been started in some enterprises to carry out a wide range of. The establishment of the system, is the enterprise of environmental management to a capital investment, can cultivate and improve corporate environmental management organization ability. Environmental management system of enterprises improve environmental management self organization evolution is inevitable. While the ISO14000 authentication mechanism is introduced, a new level of self environmental management can promote enterprise's. Therefore, to improve and perfect the enterprise environmental management system, and introduces the E0M000 authentication mechanism, there will be conducive to create self-organization enterprise environmental management, promote the evolution process of enterprise environmental management self-organization.

3.4 to increase research and development efforts in technical innovation of enterprises, enhance the enterprise technological progress and innovation of self driving role of Technology

Innovation Creating organization of environmental management, especially technical innovation environment, many are often born on enterprise level. Therefore, on the one hand, the enthusiasm to motivate employees of technological innovation; on the other hand, enterprises need to increase research and development input. Rely on technological progress and innovation to improve corporate environmental performance, does have great potential. The process of enterprise creating environmental management self-organization, to continuously perfect the system, strengthen the ability of the organization, but also to actively tap the great potential to improve the progress and innovation of enterprises technology for environmental performance. Institutional innovation and optimization of combination of technology progress and innovation, two once to realize the benign interaction, will be conducive to promoting the self-organizational evolution of enterprise environment management more.

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