

# A Review of the Impact of Environmental Policy on the Internalization of Enterprise Environmental Costs

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**Abstract :** The increasingly serious environmental problems have caused wide public concern. As the main source of industrial pollution, enterprises are responsible for environmental pollution and resource waste. Internalization of environmental cost is an effective means for enterprises to take environmental responsibility, reduce pollution emission and realize sustainable development. This paper mainly summarizes the research on the impact of environmental regulation on the internalization of environmental cost in enterprises.

**Keywords:** Environmental Policy; Environmental Cost; Internalization Mechanism; Environmental Behavior

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## 1. Introduction

With the rapid development of China's economy, the ecological environment has been seriously damaged, and the increasingly serious environmental problems have attracted wide attention from the society. With the rapid development of China's economy, the ecological environment has been seriously damaged, and the increasingly serious environmental problems have attracted wide attention from the society. In terms of environmental governance, the environmental behaviors of polluters bear the brunt, and polluters are the focus of environmental pollution. The attribute of public goods of environmental resources determines that the use of environmental resources causes serious external diseconomy, and excessive use of environmental resources have been leading to environmental pollution and ecological degradation. With the aggravation of environmental pollution, the government's environmental regulations on enterprises are also constantly strengthened, which undoubtedly poses a challenge to the economic growth mode that enterprises blindly pursue the maximization of their own interests and is bound to affect enterprises environmental behaviors <sup>[1]</sup>. At present, China has formed a relatively perfect environmental protection policy system. On the one hand, the government formulates policies and regulations to regulate and punish enterprises' pollution behaviors and restrains enterprises environmental damage and pollution behaviors. On the other hand, the government should actively adopt incentive policies to encourage enterprises to effectively conduct environmental governance, and plays a guiding role for enterprises to internalize the external environmental cost actively. Therefore, government regulation cannot fundamentally solve the problem of environmental degradation <sup>[2]</sup>. Therefore, it is necessary to internalize the external cost of the enterprise environment in order to solve the environmental problems fundamentally. Internalization of environmental cost is an effective means for enterprises to take environmental responsibility, reduce pollution emission and realize sustainable development.

## 2. A review on the definition and classification of environmental cost

Since the 1970s, foreign countries began to study environmental accounting. Studies on the Transformation of The Social Costs of Pollution Control, written by Beamons in 1971, and Accounting issues of Pollution, written by Marin in 1973, marked the beginning of studies on the environmental costs of enterprises. As the most basic concept in environmental

accounting, environmental cost was defined by the United Nations Statistics Office (UNSO) in its "Environmental and Economic Integrated Accounting System" in 1993. UN Intergovernmental Meeting of Experts on International Accounting and Reporting Standards discussed and adopted the Position Notice on Environmental Accounting and Reporting in 1998, which is the first complete guide on environmental cost accounting system in the world <sup>[3]</sup>. At present, the definition of ISAR's environmental cost is relatively accepted, which was defined as: "In the principle of being responsible for the environment, the cost of the measures required to manage the impact of the enterprise's activities on the environment and other costs incurred by the enterprise to implement the environmental objectives and requirements"<sup>[4]</sup>. This definition explains the specific content of enterprise's environmental cost accounting and the expenses of environmental cost.

### **3. The research review of environmental cost internalization**

"Internalization of environmental cost" is generated from the externality theory. It is to adopt reasonable methods to evaluate environmental external cost and internalize it into products or the cost of services to reflect resource scarcity and eliminate externalities <sup>[5]</sup>. There is a dispute between the "Pigouvian tax" of neoclassical economics and the "transaction cost and clear property right" theory of new institutional economics. Pigou explained the roots of externalities in 1920 in the "welfare economics" with "public goods" as the starting point, proposing that one person's economic activities affected the welfare of another person in the society, and the government should take economic intervention to solve the problem of market failure and realize the internalization of external effects to promote the optimal allocation of resources. Coase put forward the famous Coase theorem "externality can be solved through private negotiation and selection of transaction costs, definition and implementation of property rights" on the basis of studying foreign infringements on economic agents in 1960. The United States and some countries have successively realized the trading of pollutant emission rights or emission indexes. In 1976, When Buekleyandeassonl discussed his "economics of market internalization", he believed that under certain conditions (such as non-increasing returns to scale), the allocation of resources in a set of completely competitive markets is the most efficient, so it is necessary for enterprises to conduct transactions internally. Rugman a. A.m. formed a more realistic FDI theory by criticizing traditional FDI theory and incorporating Coase's transaction cost theory in 1981. Although the focus of the practice and study theory on the internalization of environment cost differences, all countries have a consistent understanding of the production and operation activities of microeconomic subjects accompanied by the development and utilization of natural resources and the discharge of environmental pollutants, which will lead to a reduction in natural resources and energy reserves and a decline in the quality of the ecological environment<sup>[6]</sup>.

Domestic scholars analyzed the necessity of internalization of environmental cost from multiple perspectives. In 2003, Zhuoran Xie and Gang Zong analyzed that if environmental externalities caused by environmental pollution are not included in production costs, it will distort commodity prices in international trade. Miaomiao Ning discussed the impact of internalization of environmental costs on international trade theory and practice in 2004. Xiaofen Song and Hexing Ruan argued that the internalization of environmental costs increases enterprises' costs in the short term and weakens enterprises' competitiveness in 2004. Other scholars analyzed environmental cost internalization from the perspective of sustainable development <sup>[7]</sup>. In 2000, Jie Yang believed that the production and operation activities of enterprises would inevitably produce ecological damage and environmental pollution, and the environmental costs thus caused should include the losses caused by ecological damage and environmental pollution, as well as the costs paid for the restoration of these damages and pollution. Youli Wang discussed the importance of internalization of environmental costs to the sustainable development of projects and argued that the coordinated development of environment and economy is an important basis for evaluating the economic feasibility of projects in 2005.

## 4. A review of the impact of environmental policies on the internalization of environmental costs in enterprises

Environmental policy refers to all governmental measures taken by the state to protect the ecological environment. The government's policies on the environment include both regulatory and incentive policies. Gray Deily and others conducted research on the paper and steel industries to prove the effect of environmental mandatory policies (such as mandatory emission standards) on corporate behavior; Eamhart found that pollution treatment enterprises have a strong response to fines. May and others demonstrated that mandatory environmental controls can lead to greater compliance with environmental policies. On the one hand, the government should control the intensity of regulatory environmental policies, formulate laws and regulations, standards and norms to restrain the emission of pollution by enterprises, do a good job in supervision and punishment, and enhance the enthusiasm of enterprises to participate in environmental governance and their compliance with policies. On the one hand, the government should adopt macroeconomic tools to support and encourage enterprises to take the initiative in environmental behavior. Baoyin Zhang and others proved that the government can guide enterprises to implement environmental protection behaviors by means of economic subsidies and tax incentives in 2006. In 2010, through questionnaire research, Sanfeng Zhang and others proved that environmental regulation and its intensity can improve enterprise productivity, and regulatory policies can promote enterprises to take the initiative in environmental governance. In 2012, Xingrong Chen and others divided government environmental policies into regulatory environmental policies and incentive environmental policies, established a game model, and conducted game analysis to prove that enterprises' environmental protection behaviors are carried out under active and effective government policies.

By reviewing the above literature, we can see the enterprise environmental cost internalization refers to that in order to protect the environment and prevent the destruction of the ecological pollution, the enterprise is regarded as the economic main body of production and operation activities [8], and the environmental cost is reflected in the product price of the enterprise as a new factor of production, so that the product can reflect its true value and promote the ability of enterprises to strengthen risk management.

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