

# Study on Environmental Tax: A Case of China

*Huifeng Li, Beijing Union University, China*

*Xuanwei Zhang, Beijing Union University, China*

---

## ABSTRACT

*Since the industrial age, along with the promotion of economic development, problems of ecological destruction and environmental pollution are becoming more serious. To solve this problem, the implementation of environmental tax is an effective measure. Based on the analysis of the theoretical foundation of environmental taxes, international practice and experience in environmental tax system, in this paper, the authors describe the status quo of China's environmental tax system, and frames the further step strategy in building China's environmental tax system.*

*Keywords: China, Ecological Destruction, Environmental Pollution, Environmental Tax System, Environmental Taxes*

---

## 1. INTRODUCTION

With the constant expansion both in area and in depth of human economic activities, human living environment continues to deteriorate with resources depleted and ecosystems destroyed. Environmental problems facing the world today, which is restricting economic development and threatening the survival of humanity, have become the globally common issue. Environmental pollution is the typical phenomena of externality for the market mechanisms. In order to overcome the shortcomings of market mechanisms, countries are actively and cooperatively exploring effective approaches for a living and sustainable development. Theoretically, governmental policies and measures for environment protection are of two types,

regulative measures and economic measures. Regulative measures refer to the ban, the regulations and other measures such as discharge standards and so on, especially the provisions of emission standards and technical standards, to prohibit or limit the emissions of certain pollutants, or to limit certain pollution activities to a certain extent, so that the ultimate control of pollution and the efficient use of resources can be realized. Economic measures refer to policies that can influence the polluters' costs and benefits of alternative activities to guide them to carry out environmentally-friendly options, such economic policy measures are mainly environmental taxes.

In recent years, with the environmental problems intensified, the traditional "command - control" types of control measures (command and control instruments) cannot be persisted due to its potentially high cost and low efficiency

DOI: 10.4018/jabim.2010040102

and the increasing market-oriented and decentralized behavior by various kinds of economic agents and so its drawbacks are increasingly exposed. In this context, environmental taxes, as a market-based regulatory tool, by exerting a commitment of environmental responsibility to the polluters to internalize their externality, limiting their damages to the environment and thus correcting the effect of market failure, are paid more and more concerns by more and more countries. An increasing number of countries regulate the economy running through the establishment of an environmental tax system. In March 29, 1993, the publishing by OECD of a report entitled "Tax and the Environment", which comprehensively introduced and summarized the status and experience in the implementation of environmental taxes by its member states, marks the international progress on this matter. As environmental problems are plaguing the whole world, China is no exception. In consideration of China's weak legislation on environment tax and the prevailing wave of low-carbon economy, the study of the status of China's environmental tax system, aiming at the building of the strategy for the protection of China's fragile environment and ecology, and the promoting of China's socio-economic sustainability, is a must and of practical significance.

## 2. ENVIRONMENTAL TAX AND ITS THEORETICAL BASIS

Environmental taxes are the kind levied by the government, in order to protect the environment and resources, to all its units and individuals involved in environmental resources development and utilization in accordance with their extent of development and utilization of natural resources or the extent of their damage to the environment.

Environmental taxes can be broadly divided into three categories: First, direct taxation on the amount of pollutants discharged, such as emission taxes. Emission tax is levied on the emission of pollutants to the environment at its

final stage. As a method of taxation at the source of pollutants emission, it has the advantages of low cost in taxation, targeted pollution control, etc., but the drawback is that it is focused only on certain pollutants and thus not conducive to addressing the related environmental problems; Second, indirect taxation on goods and services, i.e. by changing the rate of sales tax, VAT and other indirect taxes to prevent environmental pollution, which through increasing taxation on goods or services that are environmentally harmful or decreasing taxation on goods or services that are environmentally friendly to help promote environmentally friendly goods or services to achieve environmental objectives. At the same time, such taxes can also be a specific source of income for environment protection; Third, environmental tax exemptions. It is an exemption by the Government to certain acts conducive to environmental protection or to environmental facilities, which remission can be viewed as a kind of governmental subsidy. Western countries mainly use the former two kinds of environmental taxes. The main function of environmental taxes is to regulate the economic behavior of taxpayers in order to reduce pollution, promote the rational allocation of resources and the sustainable economic development, rather than to congregate national wealth.

The source of ideas for environmental tax is "Pigovian Tax". Modern British economist Arthur C. Pigou, through the development of the theory on externality, first proposed the idea that government tax revenue could be used to regulate polluting acts. Pigou, as early as 1920 in his "Welfare Economics", advocated that enterprise which produces external effects should be levied a "Pigou tax" to regulate their polluting behavior. According to Pigou, if polluters can be imposed a certain tax of emissions, which is equal to the difference between the marginal social cost and the marginal private cost, then the external social cost of the polluters can be internalized which can make polluters face the marginal social cost of their private activities. Li et al. (2007) indicated that stimulated by the Pigou tax, polluters can control their amount

10 more pages are available in the full version of this document, which may be purchased using the "Add to Cart" button on the publisher's webpage: [www.igi-global.com/article/study-environmental-tax/46017](http://www.igi-global.com/article/study-environmental-tax/46017)

## Related Content

---

### Supply Chain Digitalization and Operational Performance

Niken Anindaand Etikah Karyani (2022). *International Journal of Asian Business and Information Management* (pp. 1-16).

[www.irma-international.org/article/supply-chain-digitalization-and-operational-performance/298000](http://www.irma-international.org/article/supply-chain-digitalization-and-operational-performance/298000)

### Long Run and Short Run Linkages Between Credit and Output: An Appraisal of the Districts of West Bengal in India

Ramesh Chandra Dasand Bankim Ghosh (2021). *International Journal of Asian Business and Information Management* (pp. 110-123).

[www.irma-international.org/article/long-run-and-short-run-linkages-between-credit-and-output/274297](http://www.irma-international.org/article/long-run-and-short-run-linkages-between-credit-and-output/274297)

### Financial Innovation and Economic Growth: Some Further Evidence from the UK, 1900-2003

Anita Ghatak (2006). *Global Information Technology and Competitive Financial Alliances* (pp. 52-70).

[www.irma-international.org/chapter/financial-innovation-economic-growth/19218](http://www.irma-international.org/chapter/financial-innovation-economic-growth/19218)

### Fostering the Learning Capacity of Small-Scale Ethnic Chinese Business Organizations: An Exploratory Study

Thomas Menkhoffand Chay Yue Wah (2014). *International Journal of Asian Business and Information Management* (pp. 41-58).

[www.irma-international.org/article/fostering-the-learning-capacity-of-small-scale-ethnic-chinese-business-organizations/114697](http://www.irma-international.org/article/fostering-the-learning-capacity-of-small-scale-ethnic-chinese-business-organizations/114697)

### A Synthesis of Globalisation, Business Culture and E-Business Adoption in Vietnam

Huong Le, Fung K. Kooand Jason Sargent (2013). *Cultural and Technological Influences on Global Business* (pp. 120-141).

[www.irma-international.org/chapter/synthesis-globalisation-business-culture-business/76488](http://www.irma-international.org/chapter/synthesis-globalisation-business-culture-business/76488)