Analysis on synergistic effects of the ecological environment construction and the economic growth —— a case study of Shandong Province, China

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Abstract. Ecological environment construction is an important strategic decision to achieve sustainable development. It is also a potential motive force to ensure long-term, steady and orderly development of the economy. In consideration of the fact that Shandong Province is the typical epitome of China in the new era, this paper is based on comprehensive investigations on the construction status of ecological environment in 17 cities of Shandong Province, and constructs an analysis framework of the ecological environment construction and economic growth. Using methodologies of AHP Evaluation Model, Co-Integration Analysis, Granger Causality Test and Error Correction Model etc., this paper makes the empirical studies on the relations between environmental protection investment, industrial pollution control, urban environment construction, natural resources conservation and the ecological environment construction in Shandong Province. Our research found that: the overall level of ecological environment construction in Shandong province has been constantly and steadily enhanced, among which the level of urban environment construction has risen the most, followed by environmental protection investment, industrial pollution control and natural resources conservation. Besides, there is a long-term equilibrium relation between the ecological environment construction and economic growth of Shandong Province, among which the bidirectional synergistic effect on the environmental protection investment and economic growth of eastern Shandong is the most remarkable. Therefore, this paper puts forward countermeasures and suggestions, for example, implementing ecological development policies towards spatial differences, improving the ecological environment management, actively implementing environmental economic policies etc.

1. Introduction
As a representative manufacturing country and a large resource and environment country in the world, China needs to solve the problems of industrial structure adjustment, transformation of economic growth mode and ecological environment construction. However, lack of ecological environment construction may cause the pollution which further leads to economic losses, but on the other hand,
excess supply of ecological environment construction can lead to increased costs of production and life, to a great extent, become the restriction of economic growth. In view of the current economic development in China, we are trying to find the way to realize that the construction of ecological environment can not only effectively protect the resources and environment, but also ensure environmental protection can promote economic growth rather than frustrating it. This is a difficult problem that China and other developing countries need to pay attention and solve imperatively. As a typical epitome in transitional China, the stage characteristics of economic development and ecological environment as well as the endogenous force of economic growth in Shandong Province are basically consistent with the whole country. Moreover, the development differences of Eastern, Central and Western Shandong Province have become the microcosm of the current disequilibrium situation of Eastern, Central and Western China. Therefore, it is of great significance for this paper taking Shandong Province as an example to explore the typical facts and synergetic mechanisms of eco-environment construction and economic growth in Shandong Province, China in order to seek new impetus for economic growth and realize the good interaction between ecological environment construction and economic growth.

2. Literature review
In recent years, the related research carried out by theorists has made some achievements. This paper attempts to summarize the existing literature. Firstly, it has reached an initial consensus on the relationship between ecological environment construction and economic growth. It is believed that the ecological environment construction and economic growth are complementary and closely linked. It is helpful to deal with the relationship between the two, which will help to alleviate the existing regional ecological problems and lay a solid foundation for further research on the integration of ecological construction into economic growth. The second is to start from theory to reality and focus on the realization path of ecological environment construction and economic growth synergistic development. Many reference Suggestions are provided to solve the contradiction between economic growth and ecological environment.

2.1. Research on the relationship between ecological environment construction and economic growth
The research on the relationship between eco-environment construction and economic growth is mainly based on the understanding of both, economics and sociology. The intertemporal iterative model established by John and Pecchenino specifically considers the issue of intergenerational equity and analyzes the potential conflict between economic growth and ecological environment from a sociological point of view. Liu Xinhe believes that some local leaders in China have misunderstandings about the relationship between economic growth and ecological environment construction. The understanding of its relationship is one-sided, stage, utilitarian and superficiality. In the process of ecological environment construction, we should consciously overcome a number of one-sided understanding, correctly handle the relationship between the two, and firmly establish a correct view of political achievements and economic outlook. Yao Li, Chen often studied the urban competitiveness of promoting effects of ecological environment construction, put forward the construction of a harmonious society is an important aspect of urban ecological construction, it can promote the sustainable development of economy. Shao Nana said that the economic growth and ecological environment is a dialectical relationship between the two complement each other, are indispensable. The ecological environment is the carrier of economic development. At the same time, the enormous achievements in economic development will be transformed into powerful impetuses and the construction of ecological environment.

2.2. Research on the collaborative path of ecological environment construction and economic growth
Spangenberg and Omann emphasized that government policy plays an important role in the coordinated development of ecological environment and economy. As long as the government takes effective measures to solve the problem of externalities of environmental pollution, synergies between the two can be achieved. According to Han Ruiling's analysis, in order to realize the synergy and deeper interconnection between the two, it is necessary to carry out systematic coordination (elements
of economic subsystem and environmental subsystem), level coordination (system micro level), spatial coordination (The combination of different industries or departments), time coordination (coordination - disharmony - coordination phase) and other four kinds of structural coordination qu cuijie points out that it is possible to design concrete integration mechanism in the four dimensions of economic system, construction thinking, economic system and economic behavior to realize the synergy of the two in conclusion, domestic studies lack the overall grasp of the overall framework of the collaborative path, and the research on the synergistic path of the two needs to be further deepened.

By combing the domestic and foreign research literature found in the relationship between ecological environment and economic growth in the framework of collaborative research achievements of many, and for the collaborative mechanism between the ecological environment construction and economic growth of research literature is less, this is what this article research comes in. Due to the late start of the holistic study on ecology and economy in China, Application in ecological environment construction and the economic growth mode of economic development, relies on the top of the design and realization path of basic framework of research, there are many deficiencies, especially still need to improve and strengthen support guarantee mechanism of the synergy. Therefore, it is necessary to draw on the theoretical achievements and practical experience of western countries in the field of ecological environment construction. Combining with the current situation of ecological environment construction in China and Shandong Province in the new normal, this paper will study the mutual promotion and restriction between ecological environment construction and economic growth, and try to find the synergetic mechanism between them to maximize the synergistic effects.

3. Measurement and evaluation of ecological environment construction level in Shandong province

Based on the understanding of related research and based on the understanding of the concept of regional ecological environment construction, this paper divides the system of regional ecological environment into four subsystems: environmental protection capital investment, industrial pollution control, urban environmental construction and natural resources protection. The system of ecological environment construction involves a wide range, and the evaluation indexes in all fields are complex and diverse. It is impossible to choose all of them into the process of evaluation and calculation. Scientific methods must be adopted to choose indicators, so as to achieve crude and fine, and to deceive and save real. Considering the comprehensive representation of data, dynamic comparability, operability and scientific, especially given the lack of relevant data and around the city limits, this article 14 indexes were selected to reflect the overall level of ecological environment construction and internal composition, index framework as shown in table 1. The data were selected from the indicators of Shandong province and 17 prefecture-level cities from 2007 to 2015, and the data was standardized using the min-max method.

In the Process of calculating the level of ecological environment construction in Shandong province and the AHP evaluation model (Analytic Hierarchy Process) needs to be built. AHP evaluation model is a multi-objective decision analysis method combining qualitative and quantitative analysis. This method has been widely used in ecological security, regional bearing capacity and environmental planning. Data selection, processing and calculation are not described in detail here. The results show that the level of eco-environment construction in Shandong Province keeps rising steadily. Although it has declined slightly since 2013, the overall improvement has been great, which shows that eco-environment construction has a good momentum of development. Among them, the average growth rate of investment in the environmental protection as high as 23.49%, the average growth rate of the urban environment construction was 25.2%, while the growth rate of industrial pollution control and natural resource protection has been negative in recent years. This shows that the construction of ecological environment in Shandong Province in the industrial pollution control and natural resources protection relative slowdown in investment, more inclined to the direction of urban environmental construction. Overall, this is basically in line with the current status of the ecological environment in Shandong Province. At the same time, using the constructed index system, the scores of the comprehensive ecological environment construction and the four core indicators of Shandong
Province and its 17 cities in 2007-2015 can also be calculated that can be seen in the related index score of descriptive statistics, system construction of ecology and environment in Shandong province comprehensive scoring average of 0.427, system construction of ecology and environment in eastern area of score significantly higher than the average of the entire province average score, however central and Luxi area ecological environment system construction of comprehensive score is below the average of the entire province average level.

**Table 1. Comprehensive evaluation index system of ecological environment construction in Shandong Province**

| Target level                     | Guidelines layer                        | Indicator layer                                  |
|----------------------------------|-----------------------------------------|-------------------------------------------------|
| Ecological environment construction | Investment in environmental funds       | Landscaping investment                           |
|                                  |                                         | Investment in industrial pollution control       |
|                                  |                                         | Urban environmental sanitation investment        |
|                                  |                                         | The comprehensive utilization rate of            |
|                                  |                                         | industrial solid waste                           |
|                                  |                                         | Number of industrial pollution control projects  |
| Industrial pollution control     |                                         | Concentration treatment rate of sewage treatment plant |
|                                  |                                         | Standard rate of discharge of industrial         |
|                                  |                                         | waste water                                      |
|                                  |                                         | Per capita green area                            |
|                                  |                                         | Per capita road laying area                      |
| Urban Environment Construction   |                                         | Green coverage rate in urban built-up area       |
|                                  |                                         | The area of urban garden and green space         |
|                                  |                                         | Common cultivated area                           |
| Natural resources protection     |                                         | Total water resources: groundwater               |
|                                  |                                         | Forest coverage                                  |

**4. Empirical test on the coordination of ecological environment construction and economic growth in Shandong Province**

**4.1. Variable description**

**4.1.1. Economic growth.**

In the case of comprehensive consideration of the factors such as population density and geographical area, the economic growth is characterized by per capita GDP. Compared with the total amount of GDP, per capita GDP can objectively reflect the actual level of economic growth, and at the same time, it matches the index of eco-environmental construction obtained by linear weighting method.

**4.1.2. Ecological Environment Construction.**

In the four indicators of the construction of ecological environment system, the i-th city's environmental protection fund investment level in year t is expressed as IE Fundit; the i-th city's industrial pollution control level score in year t is represented by IP Contit; the i-th city The level of urban environmental construction in year t is expressed as CE Struit; the level of natural resource protection in the ith city in year t is expressed as NR Protit.

**4.2. Build dynamic panel model**

**4.2.1. Research ideas.**

Panel data in regression analysis, usually, we assume that the temporal dimension data is smooth, without considering previous related literature data stationarity directly on the basis of regression, however once the data against stationarity assumption is likely spurious regression. The Unit root test is one of the effective methods to test the stationarity in the time series data. In the panel data, the cross-sectional data sequence is integrated into the unit root test as a whole. According to the hypothesis of homogeneity and heterogeneity, Unit root test for two different assumptions. The heterogeneous is heterogeneity inspection representatives have LLC, another kind is in the house the
heterogeneity assumption, such inspection is more close to the actual, representative including Fisher - PP inspection, IPS, Fisher - ADF test.

Kao thinks, after carries on the panel unit root test, if the inspection of all the variables are the same order single whole, cointegration test is necessary, to test whether has the long-term equilibrium relationship between variables. panel co-integration test is to use the co-integration test for each individual for the panel data environment, and the method is based on the test idea of the residual error of the co-integration equation.

This article draws on the relevant literature, first using the unit root test to determine whether the variables are stable. After that, the variables of the same order can be used to determine whether the variables have a long-term equilibrium relationship. Granger causality test can be performed to determine the long-term causal relationship between variables.

4.2.2. Model construction.
The construction of ecological environment can be measured in many dimensions, and each aspect of it responds to economic growth in different ways. Environmental investment, industrial pollution control, urban environmental construction and natural resources protection are four important subsystems of ecological environment construction. However, are there any relatively fixed relations between the four and economic growth? If it exists, does it all constitute a causal relationship? To this end, this article uses a comprehensive simplified model to analyze the relationship between economic growth and ecological environment construction:

\[
\ln \text{Per}_i \text{GDP}_t = a + b_1 \ln \text{IE}_i \text{Fund}_t + b_2 \ln \text{IP}_i \text{Cont}_t + b_3 \ln \text{CE}_i \text{Stru}_t + b_4 \ln \text{NR}_i \text{Prot}_t + \epsilon_t
\]

\((i = 1,2,\cdots,17; t = 2007,2008,\cdots,2015)\)

Among them, \(\text{Per}_i \text{GDP}_t\) represents per capita GDP. \(\text{IE}_i \text{Fund}_t\) shows the level of investment in environmental funds, \(\text{IP}_i \text{Cont}_t\) industrial pollution control level, \(\text{CE}_i \text{Stru}_t\) indicates the level of industrial pollution control, \(\text{NR}_i \text{Prot}_t\) represents the level of conservation of natural resources.

When dealing with panel data, due to the short time interval, the unit root test method will fail. Therefore, log data processing is done in this paper. After processing, the possibility of non-stationary data is greatly reduced.

4.3. Empirical results
Given in this paper, the relation of ecological environmental construction and economic growth, so the next to the empirical test of per capita GDP and each subsystem, that is the unit root test, cointegration test and Granger causality test.

4.3.1. Unit root test.
Inspection rules considering the possible limitations, in order to reduce the cause of uncertainty factors to test results, this article also USES the PP - Fisher, Hadri, IPS, LLC, Breintung and ADF test – Fisher six methods respectively. The results show that per capita GDP and ecological variables in shandong province have not rejected the original hypothesis, namely, the existence of unit root. There is no unit root of the unit root test after the first difference of the variable, that is, each variable is a first-order single integer variable It can be concluded that per capita GDP has a long-term equilibrium relationship with the protection of natural resources, industrial pollution control, pollution control in environmental protection and urban environmental construction. In the same way, except for the protection of natural resources and the control of industrial pollution in Shandong Province, the remaining variables are all first-order single-integer variables. Luxi area except for industrial pollution control as a stable variable, the remaining variables for the first order single integer variables.

4.3.2. Cointegration test.
From the above unit root test, it can be known that the per capita GDP and natural resource protection, industrial pollution control, environmental protection fund input and urban environment construction of the ludong area are first-order single integer variables. The per capita GDP, environmental protection fund input and urban environment construction of lu zhong district are first-order single integer variables; The per capita GDP, natural resources protection, environmental protection fund
input and urban environment construction of luxi area are one-order integral variables. This paper mainly studies the relationship between GDP per capita and ecological environment construction, so only examines the cointegration relationship between per capita GDP and each variable.

Cointegration test by traditional two-step E - G, namely the whole GDP per capita of first order list first to explain the variable regression, to test whether the residual is smooth, smooth if residuals are confirming the per capita GDP and the ecological environment construction of each variable has a long-term cointegration relationship, we performed the co-integration test under the premise of the residual sequence with no intercept term and trend phase, and the results are shown in table 2.

**Table 2. Results of Co-Integration Analysis**

|                     | Pedroni  | Kao       | Fisher    |
|---------------------|----------|-----------|-----------|
| **Ludong area**     |          |           |           |
| $\ln IE_{Funda}$    | -2.5912*** | -0.3776 | 37.1300*** |
|                     | (0.0048) | (0.3529) | (0.0002)  |
| $\ln IP_{Conta}$    | -1.4794*  | 0.7312   | 34.6400*** |
|                     | (0.0695) | (0.2323) | (0.0005)  |
| $\ln CE_{Strua}$    | 1.5059   | -0.2996  | 18.6500*  |
|                     | (0.9340) | (0.3822) | (0.0973)  |
| $\ln NR_{Protu}$    | -1.9537** | -5.0748*** | 37.1300*** |
|                     | (0.0254) | (0.0000) | (0.0002)  |
| **Luzhong area**    |          |           |           |
| $\ln IE_{Fundu}$    | -1.4797*  | 0.3473   | 16.4300*  |
|                     | (0.0695) | (0.3642) | (0.0879)  |
| $\ln CE_{Strua}$    | -1.8058** | 0.6891   | 22.4900** |
|                     | (0.0355) | (0.2454) | (0.0128)  |
| **Luxi area**       |          |           |           |
| $\ln IE_{Fundu}$    | -1.2327  | -0.2193  | 14.8000   |
|                     | (0.1088) | (0.4132) | (0.2528)  |
| $\ln CE_{Strua}$    | -2.1282** | 0.4596   | 22.8400** |
|                     | (0.0167) | (0.3229) | (0.0291)  |
| $\ln NR_{Protu}$    | -2.9389***| -0.2438  | 8.9140    |
|                     | (0.0016) | (0.4037) | (0.7103)  |

***, **, * respectively, 1%, 5%, 10% of the level of significant.

The results show that the residuals of regression analysis using per capita GDP as explanatory variables in Ludong, Central China and Western regions rejected the null hypothesis in varying degrees, indicating that there is a cointegration relationship between per capita GDP and each variable of ecological environment construction.

4.3.3. Granger causality test.

Due to the cointegration relationship between GDP per capita and the variables of eco-environment construction, we further establish Granger causality test to test the long-term causality between these variables as shown in Table 3.

According to the Granger test results, it is found that in terms of Ludong Peninsula in Shandong Province, natural resource protection and urban environmental construction are the reasons for economic growth. Economic growth is the reason for industrial pollution control. However, the economic growth and the environmental protection fund input each other reason and the significance level is relatively high. This may be due to the high level of economic development and high degree of industrial pollution. And the environmental protection investment and economic growth of both
collaborative relationships is reflected in higher levels of economic growth to pay more attention to environmental protection funds devotion, positive effects brought by the environmental protection investment and further promote the economic growth, a virtuous circle.

**Table 3. Results of Granger Causality Test**

| Null Hypothesis: | Obs | F-Statistic | Prob. | result |
|------------------|-----|-------------|-------|--------|
| **Ludong area (lagged three)** | | | | |
| ln NR Prot$_{t}$ does not Granger Cause lnPer GDP$_{t}$ | 42 | 2.3474 | 0.0933 | refuse |
| lnPer GDP$_{t}$ does not Granger Cause ln NR Prot$_{t}$ | | 1.2482 | 0.3104 | No-refusal |
| ln IP Cont$_{t}$ does not Granger Cause lnPer GDP$_{t}$ | 42 | 1.0227 | 0.3970 | No-refusal |
| lnPer GDP$_{t}$ does not Granger Cause ln IP Cont$_{t}$ | | 2.8251 | 0.0561 | refuse |
| ln IE Fund$_{t}$ does not Granger Cause lnPer GDP$_{t}$ | 42 | 0.61275 | 0.0122 | refuse |
| lnPer GDP$_{t}$ does not Granger Cause ln IE Fund$_{t}$ | | 1.86293 | 0.0158 | refuse |
| ln CE Stru$_{t}$ does not Granger Cause lnPer GDP$_{t}$ | 42 | 2.51437 | 0.0780 | refuse |
| lnPer GDP$_{t}$ does not Granger Cause ln CE Stru$_{t}$ | | 1.25873 | 0.3068 | No-refusal |
| **Luzhong area (lagged three)** | | | | |
| ln IE Fund$_{t}$ does not Granger Cause lnPer GDP$_{t}$ | 35 | 2.9354 | 0.0548 | refuse |
| lnPer GDP$_{t}$ does not Granger Cause ln IE Fund$_{t}$ | | 0.43963 | 0.7268 | No-refusal |
| lnPer GDP$_{t}$ does not Granger Cause ln CE Stru$_{t}$ | 35 | 16.7213 | 0.0006 | refuse |
| ln CE Stru$_{t}$ does not Granger Cause lnPer GDP$_{t}$ | | 5.07507 | 0.0077 | refuse |
| **Luxi area (lagged three)** | | | | |
| ln NR Prot$_{t}$ does not Granger Cause lnPer GDP$_{t}$ | 42 | 0.50812 | 0.6798 | No-refusal |
| lnPer GDP$_{t}$ does not Granger Cause ln NR Prot$_{t}$ | | 1.82036 | 0.1655 | No-refusal |
| lnPer GDP$_{t}$ does not Granger Cause ln IE Fund$_{t}$ | 42 | 0.35401 | 0.7866 | No-refusal |
| ln IE Fund$_{t}$ does not Granger Cause lnPer GDP$_{t}$ | | 2.26797 | 0.1016 | No-refusal |
| lnPer GDP$_{t}$ does not Granger Cause ln CE Stru$_{t}$ | 42 | 3.0696 | 0.0434 | refuse |
| ln CE Stru$_{t}$ does not Granger Cause lnPer GDP$_{t}$ | | 2.15988 | 0.1143 | No-refusal |

The test results in Luxi area show that the investment in environmental protection is the reason for economic growth and the mutual construction of urban environment and economic growth are the reasons for each other. Considering the Special Administrative Region of the city in economic development category, although slightly lower than the eastern Shandong coast, but due to the effects of radiation caused by the political center of the city, and for the city construction and environmental protection of the rigid demand, city construction level and investment in environmental protection has become one of the causes of economic growth, to further verify the environmental protection city environment construction of capital investment and economic growth have certain contribution.

For the Luxi area, economic growth is the reason for the construction of urban environment. Combined with the regional urban industrial development, lagging economic growth and natural environment typical low level of development, characterized by less industrial pollution, natural environment protection is relatively good Luxi don't need to spend a lot of environmental protection funds, while economic growth brought about by the investment mainly focused on urban environmental construction.
It can be seen from the above analysis that the eco-environment construction in Shandong Province mainly focuses on the Ludong and Luzhong areas where the economic growth is fast. In ecological environment construction system, environmental protection investment, the highest correlation and urban environmental construction and economic growth in the stage of a high level of economic development, the long-term equilibrium relation is more significant. It is of great significance for Shandong province to balance economic growth and ecological environment construction.

5. Conclusions and Suggestions
Through constructing AHP evaluation model, this paper estimates the level of eco-environment construction in Shandong Province of China. The results show that eco-environment construction in Shandong Province has a good momentum of development. The average annual growth rate of investment in environmental protection is as high as 23.49%. Paper then in 17 cities in Shandong province as samples, by constructing the east, middle and west area of the dynamic panel data, using the panel unit root test, cointegration test and Granger causality test to confirm the ecological environment construction and the interactive mechanism between economic growth, especially in eastern Shandong environmental protection level of capital investment and economic growth of two-way synergies is most closely. As stated, there is a long-term equilibrium relationship between eco-environmental construction and economic growth in Shandong Province and the differences in the indicators between regions make this long-term equilibrium relationship different. Therefore, in the face of differentiated synergy, Shandong East region should continue to increase investment in environmental protection, strengthen the intensity of environmental governance, and achieve a win-win goal of economy and environment. The central and western regions depends on the level of economic development and natural environmental conditions and shall be based on resource intensive, output and environmental effect as the standard, on the basis of economic growth, increasing environmental protection investment level, promote urban environmental construction.

In summary, the maintenance, construction and development of ecological environment system are the inevitable trends of economic and social development. Although the rate of economic growth is gradually slowing down and the industrial structure is undergoing transformation and upgrading, these will not hinder the sustainable development of the ecological environment. In particular, can be environmental protection investment for economic growth and ecological environment construction important point to ecological environment construction to become new economic growth point, in effectively improve the environment and promote economic growth, achieve the win-win situation. In addition, this article also attempts to build the following ecological environment construction path and development strategy that matches the current real economy with a view to further promoting the coordinated development of ecological environment construction and economic growth in Shandong Province and even the whole country.

First, the implementation of regional differences in ecological development policy and the previous text compares the level of ecological environment construction in different regions of Shandong Province through empirical research. Combination between peninsula, Shandong and Shandong province economic development present situation, in Shandong province in the future should be the combination of ecological economy and ecological integration way, namely in the higher level of economic development and ecological environment construction of the relatively low scores of regional ecology and economic process, Including: First, the regional economy and society and the ecological environment configuration harmony; Second, from production to consumption of the whole process of ecological; Third, ecological asset reconstruction and function activation. By promoting economic ecology, we can effectively reduce the degree of ecological scarcity. In the underdeveloped areas with relatively high comprehensive ecological environment construction and low economic development level, the process of ecological economy is promoted. The main contents include: First, the asset of ecological resources; Second, the value of ecological assets; Third, the supply of ecological services and consumer costs. In this way, by increasing investment in the ecological environment assets of the poor people, we can improve the living standard of the low income areas with abundant ecological resources but backward economy.
Second, improve ecological management. Due to the lack of the existing ecological environment construction in Shandong province environmental protection input levels, features uneven regional ecological environment construction, and economic development level is not matching, etc, and the ecological environment destruction caused by the huge economic losses, for future economic growth in Shandong province has become increasingly apparent negative effect. Therefore, we must strictly manage the ecological environment, protect the environment while developing the economy, and achieve a benign interaction between ecological environment construction and economic growth. Specifically include the following measures: the implementation of total control and emissions trading; reform of environmental protection charging system; strict implementation of environmental accountability; the establishment of environmental information disclosure system; early control of urban traffic pollution; actively encourage and guide enterprises to participate in CDM cooperation projects to improve the pollution supervision mechanism.

Third, actively develop a green economy. Based on the relevant policy of strategic foresight, planning and guidance, governments should adopt more economic incentives and tax subsidies as well as other environmental economic measures to promote and improve the ecological environment construction. For example, establish and improve the green capital market; improve the ecological compensation mechanism; promote green taxes; vigorously promote green insurance; implement environmental trusts; and create a clean venture capital fund.

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