

International Journal of Social Science Exceptional Research

Evaluate the index to ensure compliance with minimum environmental standards in Vietnam

Luong Thi Huyen

University of Labour and Social Affairs, Hanoi, Vietnam

* Corresponding Author: **Luong Thi Huyen**

Article Info

ISSN (online): 2583-8261

Volume: 03

Issue: 02

March-April 2024

Received: 22-12-2023;

Accepted: 26-01-2024

Page No: 01-06

Abstract

The goal of the green index is to promote provinces and cities in Vietnam to pay more attention to economic development associated with environmental protection, providing timely information to support provincial and city governments in political planning, promote the building of an environmentally friendly business ecosystem, contributing to attracting investors with environmental protection awareness and "green" quality projects for Vietnam. The provincial green index is evaluated and ranked based on 4 component indexes: Minimizing environmental pollution and negative impacts of climate change; Ensure compliance with minimum environmental standards; The role of provincial governments in promoting green practices; Policies and services to support businesses in environmental protection. This article aims to evaluate the provincial green index of provinces and cities in 2022 through the component index "Ensuring compliance with minimum environmental standards", thereby examining the causes leading to different results between provinces, and learn about policies for provinces to achieve sustainable development goals through improving the PGI index in general and the component index "Ensuring compliance with minimum environmental standards" in particular.

Keywords: PGI, Provincial green index, ensuring compliance, environmental standards

1. Introduction

The Provincial Green Index aims to encourage and promote the efforts of provincial governments towards private sector development in the spirit of the National Green Growth Strategy and the National Strategy to Respond to Climate Change. The provincial green index set is expected to become an effective operating tool for local governments as well as help businesses have a reference source of information about local priorities in building a business environment associated with sustainable development. This is considered a solution to the problem of economic development, but still ensures environmental sustainability. In recent years, the effectiveness of environmental management has become more urgent in the face of major environmental incidents caused by corporate violations, leading to greater concern from the people. However, the frequency of environmental inspections has tended to decrease in recent years, as many businesses reported that they had to incur additional costs due to frequently having to receive inspection teams from state agencies. Therefore, it is necessary to measure the efforts of the provincial government to promote environmental safety standards through the issuance of good quality policies and regulations, carry out reasonable environmental inspection and strictly enforce the law in cases of violation. This measurement must ensure both the direction of businesses and the direction of management agencies, including businesses' feelings about the drastic level of the provincial government in penalizing businesses that cause pollution and enforce environmental policies and reflect the assessment of state management agencies on the level of compliance with waste discharge regulations of enterprises. Therefore, the goal of this article is to evaluate the provincial green index of provinces and cities in 2022 through the component index "Ensuring compliance with minimum environmental standards", thereby examining the causes leading to different results between provinces, and exploring policies to help provinces achieve sustainable development goals through improving the PGI index in general and the component index "Ensuring compliance with minimum environmental standards" in particular.

2. Theoretical basis

The Provincial Green Index is a set of indicators that evaluate and rank the quality of local environmental governance from the perspective of business practices such as the level of application of environmentally friendly technology by businesses, and the level of governance and environmental behavior of businesses, the level of concern and willingness to invest in environmental issues of local governments and many other important environmental issues. The Provincial Green Index includes 4 component indices made up of 44 indicators measuring the quality of environmental governance in provinces and cities in the direction of linking environmental protection with economic development.

Ensuring compliance with minimum environmental standards is one of the four components of the PGI index. This component measures the effectiveness of environmental regulation monitoring and enforcement by provincial governments to minimize environmental harm caused by enterprises' production and business activities. Component index 2 includes the following indicators: The province has effective solutions to prevent environmental pollution (% of businesses agree); The province quickly overcomes environmental pollution incidents (% of businesses agree); The province seriously sanctions businesses that pollute the environment (% of businesses agree); Environmental inspection creates opportunities for inspection officers to check and harass businesses (% of businesses); Which agencies have inspected businesses in the past year: Environmental inspection (% of businesses); Enterprises have paid unofficial fees to environmental inspectors (% of enterprises); Ministry of Natural Resources and Environment data: Percentage of urban domestic wastewater treated to meet environmental technical standards (%); Ministry of Natural Resources and Environment data: Percentage of production, business and service establishments generating wastewater of 50 m³/day or more with wastewater treatment systems meeting environmental technical regulations (%); Ministry of Natural Resources and Environment data: Percentage of household solid waste classified at source (%); Data from the Ministry of Natural Resources and Environment: Domestic solid waste is treated to meet environmental protection requirements (%).

The component index "ensuring compliance with minimum environmental standards" is built with four dimensions. Dimension 1 includes three evaluation criteria based on the business's perception of responding to the environmental module. These three indicators correspond to three questions about different aspects of state environmental management functions: prevention, response, and accountability. The first indicator measures the effectiveness of the provincial government's efforts in preventing environmental risks through businesses' comments on the provincial

government's punishment of polluting businesses. The second indicator evaluates the level of timely response of the provincial government when an environmental incident occurs. The last indicator shows how businesses feel about how the provincial government handles polluting businesses. Dimension 2 of this component index uses three questions from the PCI survey for the purpose of measuring the environmental regulatory and procedural burden of businesses in the PGI index. The first indicator of this dimension measures the burden of environmental inspection in the past year in localities. The next indicator uses another question to dig deeper into how businesses perceive environmental inspection activities. Dimensions 3 and 4 evaluate very different pollution reduction activities. Wastewater collection and treatment activities are measured by dimension 3. Wastewater here includes domestic wastewater and wastewater from production activities to prevent toxic substances from polluting water sources, causing harm to human health and to manufacturing industries that depend on clean water such as aquaculture and agriculture.

This component index is constructed with four edge dimensions. The first two dimensions use PGI 2022 survey data on businesses' perceptions of the provincial government's drastic level in penalizing polluting businesses and the quality of enforcement of environmental policies. The remaining two dimensions use hard data from the PEPI index to reflect the assessment of state management agencies on the level of compliance with waste discharge regulations of businesses. According to the PGI methodology, dimensions 1 and 2 are assigned an equal weight of 30%, while dimensions 3 and 4 using hard data from the Ministry of Natural Resources and Environment are both weighted at 20%.

3. Index of ensuring compliance with minimum environmental standards in Vietnam in 2022

Survey results of the index "Ensuring compliance with minimum environmental standards" in Vietnam in 2022 measure the efforts of provincial governments to promote environmental safety standards through promulgating policies, regulations are of good quality, carry out reasonable environmental inspections and strictly enforce the law in cases of violations. Figure 1 shows the provinces and cities with the lowest scores, including Hanoi (3.15 points), Ben Tre (3.36 points), Binh Thuan (3.48 points), Ca Mau (3.31 points), Tuyen Quang (3.40 points), Phu Yen (3.51 points), Kien Giang (3.36 points), Soc Trang (3.4 points), Tien Giang (3.27 points), and Ninh Binh (3.42 points). Hanoi is the city with the lowest score, a locality that does not implement minimum environmental protection policies and regulations well, and does not handle violations well.

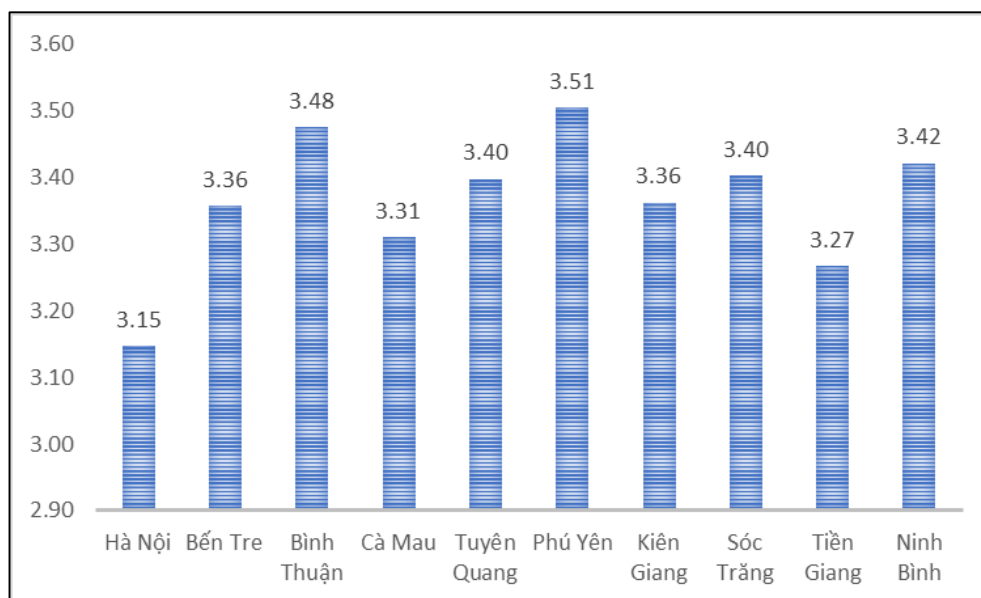


Fig 1: Scores of 10 provinces with the lowest "Ensuring compliance with minimum environmental standards" Index

Figure 2 shows the scores of 10 provinces and cities with the highest "Ensuring compliance with minimum environmental standards" index, including Lao Cai (5.51 points), Vinh Phuc (5.51 points), Bac Giang (6.01 points), Bac Kan (5.79 points), Hai Duong (4.61 points), Da Nang (6.74 points), Quang Ninh (5.26 points), Bac Ninh (5.23 points), Lang Son (5.46 points), and Tra Vinh (5.54 points). These are provinces that have

issued good quality policies and regulations, carried out reasonable environmental inspections and seriously enforced the law in cases of violations. Especially Da Nang, this is a locality that does a good job of ensuring compliance with minimum environmental standards and is ranked 1/63 provinces and cities.

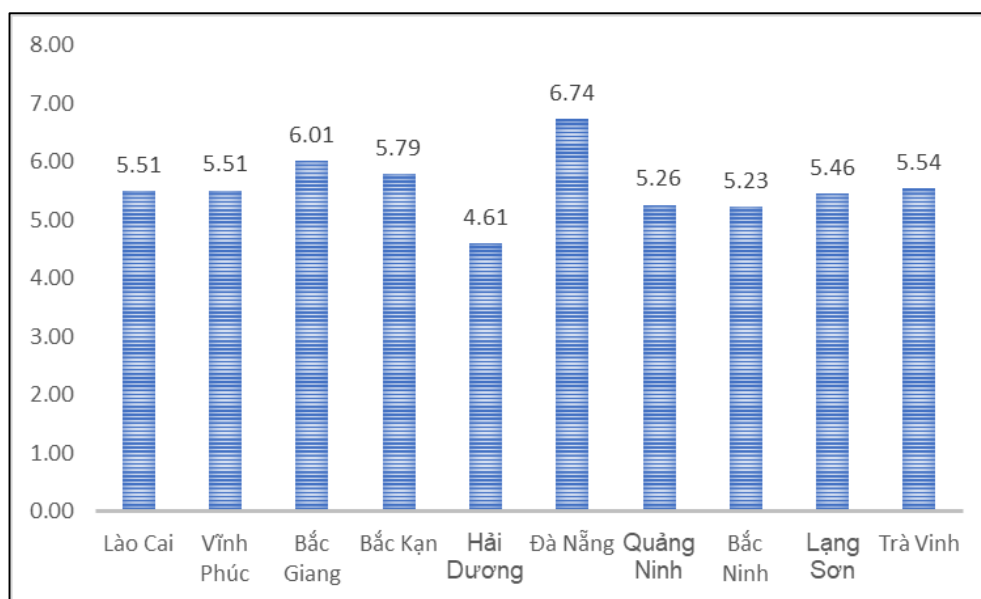


Fig 2: Scores of 10 provinces with the highest "Ensuring compliance with minimum environmental standards" Index

The component index "Ensuring compliance with minimum environmental standards" is built with four dimensions. The first two dimensions use PGI 2022 survey data on businesses' perceptions of the provincial government's drastic level of punishment for polluting businesses and the quality of enforcement of environmental policies. The remaining two dimensions use hard data from the PEPI index to reflect the assessment of state management agencies on the level of compliance with waste discharge regulations of businesses. The lowest and highest scores according to the dimensions are shown in Table 1. With the dimension "Solutions to

prevent environmental pollution of the provincial government", the median score is 1.59 and the province with the lowest score is Ca Mau (1.07 points), the province with the highest score is Lam Dong (1.78 points). With the dimension "Quality of enforcement of environmental laws", the median score is 1.29. and the province with the lowest score is Dien Bien (1.21 points), the province with the highest score is Vinh Long (1.41 points). With the dimension "Hard data on wastewater treatment and collection", the median score is 1.13. and the province with the lowest score is Hanoi (0.51 points), the province with the highest score is Da Nang

(1.99 points). For the dimension "Hard data on solid waste treatment and collection", the median score is 1.1 and the

province with the lowest score is Hau Giang (0.2 points), the province with the highest score is Lam Dong (2.0 points).

Table 1: Scores of indicators Component index 2 “Ensuring compliance with minimum environmental standards”

Assessment criteria	Lowest score		Highest score		Median score	
Ensure compliance with minimum environmental standards	4.03	Bình Thuận	6.74	Đà Nẵng	5.06	Bà Rịa Vũng Tàu
Dimension 2.1. Solutions to prevent environmental pollution by the provincial government	1.07	Cà Mau	1.78	Lâm Đồng	1.59	Hưng Yên
Dimension 2.2. Quality of enforcement of environmental laws	1.21	Điện Biên	1.41	Vĩnh Long	1.29	Quảng Ngãi
Dimension 2.3. Hard data on wastewater treatment and collection	0.51	Hà Nội	1.99	Đà Nẵng	1.13	Phú Yên
Dimension 2.4. Hard data on solid waste collection and treatment	0.2	Hậu Giang	2.0	Lâm Đồng	1.1	Tây Ninh

Details of the three dimensions of "Solutions to prevent environmental pollution of the provincial government" include: The Province has effective solutions to prevent environmental pollution, the Province quickly overcomes environmental pollution incidents, the school and the province seriously punish businesses that pollute the environment. These are indicators that demonstrate state environmental management functions: prevention, response, and accountability. Binh Thuan is the locality with the lowest

scores for the 3 component indicators at 59%, 54%, and 58% respectively. Bac Giang is the locality with the highest scores for the 3 component indicators at 84%, 82%, and 84% respectively. More than 73% of businesses agree with the statement "local authorities have effective solutions to prevent environmental pollution". 72% of businesses agreed with the statement "environmental pollution incidents are quickly resolved by local authorities". 75% of businesses in Vietnam trust local authorities to seriously punish violations.

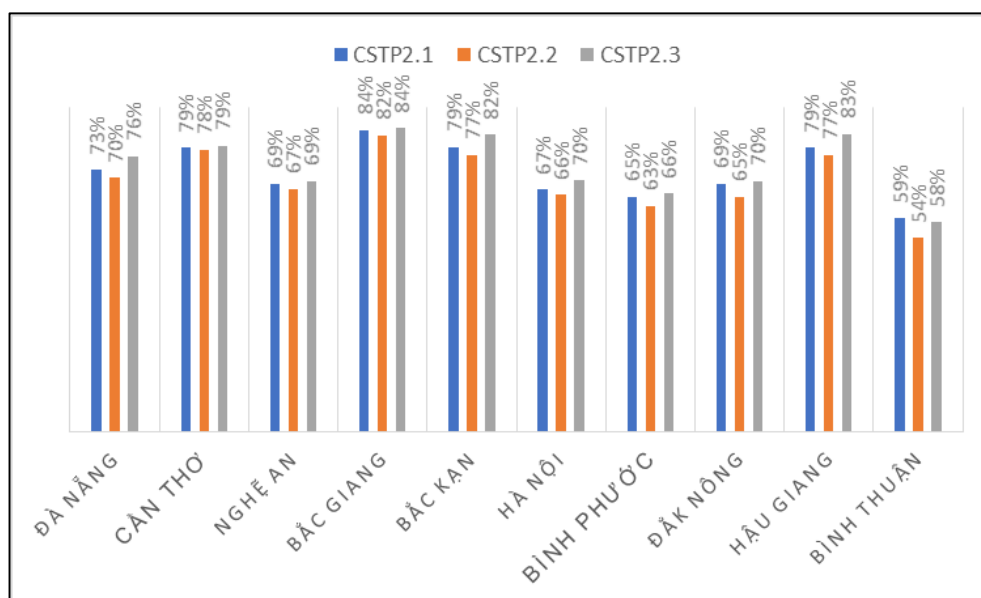


Fig 3: Dimension ratio 1 of the index “Ensuring compliance with minimum environmental standards”

Dimension 2 of this component index uses three questions from the PCI survey for the purpose of measuring the environmental regulatory and procedural burden of businesses. Including indicators Environmental inspection creates opportunities for inspection officers to check for harassment of businesses, Environmental Inspectorate is any agency that has inspected businesses in the past year, and businesses have paid unofficial costs for environmental inspectors. Survey results show that 6% of businesses said that in the past year, their businesses worked with inspection agencies in the field of enforcing environmental regulations

in provinces and cities. 5% of businesses believe that environmental inspection is an opportunity for inspection officials to harass businesses. Only 1.8% of businesses said they paid unofficial costs for environmental inspection. Bac Giang is the place that receives the most environmental inspections with 12% of businesses having contact with environmental inspectors. 0% is data on unofficial costs incurred in Can Tho when dealing with environmental inspectors. 11% of businesses in Binh Thuan believe that inspections are an opportunity for inspection officers to harass businesses.

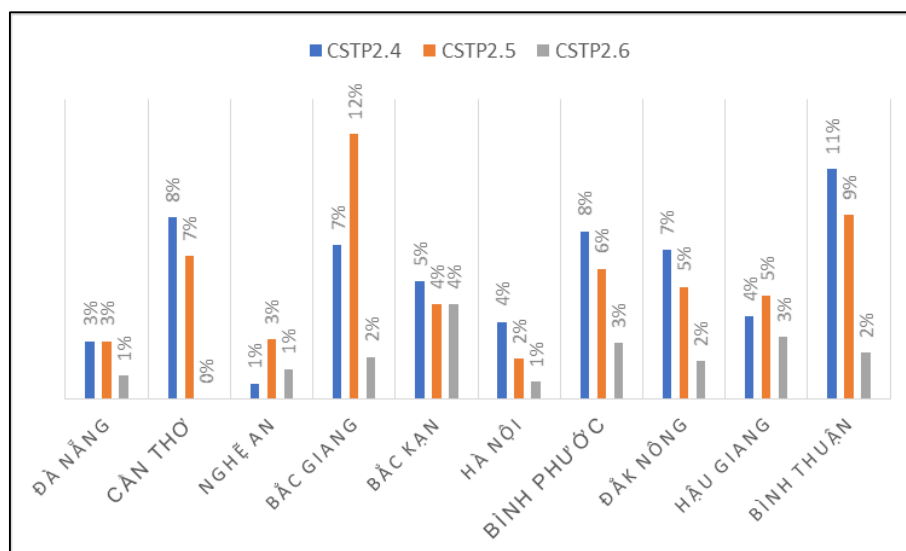


Fig 4: Dimension 2 ratio of the index “Ensuring compliance with minimum environmental standards”

Dimensions 3 and 4 evaluate very different pollution reduction activities. Wastewater collection and treatment activities are measured by dimension 3. Wastewater here includes domestic wastewater and wastewater from production activities to prevent toxic substances from polluting water sources and causing harm for human health and for industries that depend on clean water such as aquaculture and agriculture. Da Nang is the best waste treatment locality, the proportion of urban domestic wastewater treated meets environmental technical standards

(88%), Percentage of production, business and service establishments generating wastewater of 50 m³/day or more with wastewater treatment systems that meet environmental technical regulations (99%), The proportion of household solid waste is classified at source (80%), and household solid waste is treated to meet environmental protection requirements 100(%). Many localities have a water and solid waste treatment rate of 0% such as Hanoi, Hau Giang, Binh Thuan.

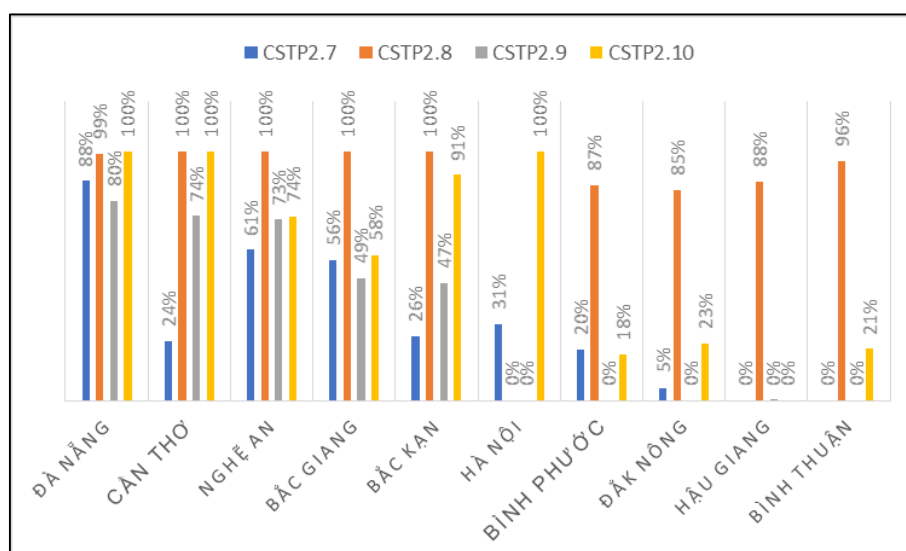


Fig 5: Ratio of dimensions 3 and 4 of the index “Ensuring compliance with minimum environmental standards”

According to the survey results on the index "Ensuring compliance with minimum environmental standards" in 63 provinces and cities in Vietnam in 2022, Da Nang has quite a gap with other localities because of its scores. Indicators from survey data and hard data of Da Nang are both high. With the issued policies, Da Nang is considered a province that has issued a clear set of criteria on environmental protection applicable to the public and private sectors. Da Nang City is the first locality in the country to implement a project using the 3R (Reduce - Reuse - Recycle) waste management and treatment model.

4. Conclusion

The results of the provincial green index survey in Vietnam in 2022 aim to promote the Green Index to become a tool to help provincial and city governments get timely information about local environmental quality and orientation in licensing and screening investment projects. This toolkit will provide the Government and the Ministry of Natural Resources and Environment with useful information about the current environmental situation at the enterprise level. This index is also expected to create direction and pressure for businesses to invest more widely in environmental issues. The top 5

localities with the highest PGI 2022 Green Index scores include: Tra Vinh, Lang Son, Bac Ninh, Quang Ninh and Da Nang. The 2022 PGI Index survey results show that the environmental quality of localities needs to be paid more attention to improvement, more than half of businesses nationwide evaluate local environmental quality as good or very good. More than 73% of businesses agree with the statement "local authorities have effective solutions to prevent environmental pollution". 72% of businesses agreed with the statement "environmental pollution incidents are quickly resolved by local authorities". 5% of businesses think that environmental inspection is an opportunity for inspection officials to harass businesses. 1.8% of businesses said they paid unofficial costs for environmental inspection. The rate of treated wastewater in Ha Giang is 0%, while in Da Nang, a locality in the top group, it is over 88%.

Ensuring compliance with minimum environmental standards is done through developing plans to prevent and respond to environmental incidents at the provincial and district levels. Invest in completing the domestic wastewater collection and treatment system in the province, with the goal of striving for the rate of domestic wastewater collection and treatment in the city and urban areas of type IV or higher by 2025.

5. References

1. Website <https://pcivietnam.vn/>
2. Website <https://moit.gov.vn/>
3. Website <https://baochinhphu.vn/>
4. Website <https://vccinews.vn/>