



Received: 01-09-2023 **Accepted:** 11-10-2023

International Journal of Advanced Multidisciplinary Research and Studies

ISSN: 2583-049X

Transforming Industrial Structure in Vietnam towards Green Growth and Sustainable Development

¹ Trần Huy Hùng, ² Cao Mai Quỳnh, ³ Ninh Thị Thuý Ngân ^{1, 2, 3} University of Labour and Social Affairs, Hanoi, Vietnam

Corresponding Author: Trần Huy Hùng

Abstract

The purpose of economic restructuring is to implement the industrialization and modernization policy of each country, especially the industrial structure, in which the industrial structure is one of the three contents that create the quality of growth. The article studies the current status of industrial restructuring in Vietnam in the period 2018-2022. With data collected from the statistical yearbook, the study shows the process of industrial restructuring in Vietnam over time. has not yet ensured sustainability factors in all three aspects: economy-society-environment, including the economic

structure shifting slowly; Industrial development lacks sustainability, traditional industries tend to disappear; The strong and inconsiderate increase in exploitation and processing industries has led to a situation where the natural environment in many places is seriously degraded, polluted and degraded. From the research results, the research team proposed a number of solutions such as policy directions to attract investment to high-tech industries, preserve and develop traditional craft villages and associate structural transformation with environmental protection.

Keywords: Economic Restructuring, Industrial Structure, Sustainable Development, Vietnam

1. Introduction

As a country emerging from agriculture, Vietnam has integrated and absorbed scientific and technical advances from countries around the world. During the integration process, Vietnam has much potential to attract investment and develop the economy. From an agricultural country with a backward economy, after more than 30 years of international economic integration, Vietnam has made efforts to develop, and the socio-economy has had many clear changes, especially in the field of economic development industry.

Recently, Vietnam is facing many challenges in sustainable economic development. Industrial restructuring is one of the solutions proposed to help our country achieve more sustainable and equitable development. Industrial restructuring is one of our country's significant efforts to adapt to regional and world markets, while meeting the market's increasing production and consumption needs. However, this transition process is not simple and requires the consensus and efforts of many stakeholders to achieve the highest efficiency.

Industrial restructuring is focusing on investing in industries with potential to improve labor productivity and product quality. Factors affecting the process of industrial restructuring are very diverse, from socio-economic factors, production regulation factors, to natural resource factors. The State has set out a path to develop industrialization and modernization in the current period, aiming to introduce new and more competitive products in the market. However, to achieve this goal, it is necessary to invest in research, technological innovation, improve production capacity and manage product quality.

Market impact is an important factor in the process of industrial restructuring. Changes in market demand greatly affect production, thereby changing industry and product structure. Therefore, understanding and meeting market needs is essential to launch new products, helping to enhance the competitiveness of businesses and bring Vietnam's economy closer and closer to the market international.

Besides, resources, including natural and socio-economic resources, also play an important part in the process of industrial restructuring. Raw material and labor resources in underdeveloped areas are exploited and utilized to increase income and improve people's lives, while contributing to the socio-economic promotion of these areas. This also helps promote the process of industrial restructuring, bringing Vietnam's economy to more sustainable development and access to international markets. Industrial restructuring is important in ensuring industrial diversification. This helps avoid over-reliance on certain industries, while also helping to develop different industries at the same time. This shift also helps create more high-value products and

services, thereby enhancing our country's competitiveness in the international market.

Besides, industrial restructuring also has a positive impact on improving labor productivity and product quality. From there, our country can create many new products and services, meeting market needs and at the same time creating more job opportunities for workers.

Industrial restructuring also helps our country develop industries that can take advantage of domestic resources and increase the added value of products and services. This helps the country increase its competitiveness in the international market.

Thus, industrial restructuring is one of the important solutions to help Vietnam achieve more sustainable and equitable development. This helps strengthen Vietnam's competitiveness in the international market, while creating many job opportunities for workers and developing potential industries.

However, besides the achieved results, Vietnam is facing difficulties and challenges. Therefore, in the following years, in addition to implementing policies to effectively promote policies to attract foreign direct investment (FDI), continue to perfect the industrial structure to promote advantages of the country is an issue that needs attention.

2. Research Methods

Information collection method: The article uses secondary information through statistics from the statistical yearbook from 2018 to 2022, documents related to industrial economic restructuring in Vietnam. Male.

Methods of processing and analyzing information: After collecting information, it is processed using Excel software and using analytical methods such as: Descriptive statistics method, comparison method to evaluate the current status of transformation. Industrial restructuring in Vietnam.

3. Research Overview

* The Economic Structure

Economic structure is a whole made up of many economic factors of the national economy, between them there is an organic relationship, interacting with each other in certain spaces, times and under certain conditions. Specific socioeconomic conditions. It fully demonstrates both qualitative and quantitative aspects, both quality and quantity, and moves towards certain goals of the economy. (Ha, N., 2014)

According to the Vietnam Encyclopedia: Economic structure is the totality of economic sectors, fields, and divisions with relatively stable organic relationships (National Dictionary Compilation Center, 1995) [5]. Economic structure includes economic sector structure, economic region structure and economic sector structure, in which economic sector structure plays a decisive role. The above division of economic structures is not the only way of division, and even more so, there are not only those types of economic structures. In fact, depending on the research objective, one can divide it in different ways, and within each type of structure, it in turn includes many other types of structures.

* Economic Industry Structure

Economic sector structure is the synthesis of economic sectors and the proportional relationship between sectors expressed in the position and proportion of each sector in

the overall national economy. The economic sector structure reflects the level of social division of labor in the economy and the level of development of the productive forces (Thang, B., 2006) [4].

* Industry Structure

Industrial structure is the number of industrial components and the interactions between the components. An industry is only considered developed when it has a balanced and reasonable structure.

Quantitatively, industrial structure is determined by the proportion of output value (or GDP) of each department in the total output value (or GDP) of the entire industry. This density depends on the position of each part in the system. Key and spearhead industries often account for a large proportion, because they are always given priority for development investment. New industries often account for a small proportion at first, but this proportion will gradually increase with their maturity. Classified by level 1 industry, Vietnam's industry has 3 industry groups: mining industry; processing industry and manufacturing industry, gas, electricity and water distribution (Bac, N., (2010) [2].

An industrial structure is considered balanced and reasonable when it exploits and takes advantage of the resources, strengths and comparative advantages of countries, territories and localities to create good conditions for development. industrial development, at the same time the industrial structure must shift towards modernization (Thang B, 2006) [4]. In addition to determining the internal structure of industry, we also have to pay attention to industry's contribution to the overall economic structure, in other words, the proportion of industry in GDP. A locality or country is only considered to have a developed industry when the proportion of industry in GDP is increasing.

* Green Growth in Vietnam

Green growth is an approach to achieving economic growth, with the aim of reducing poverty and ensuring environmental sustainability. Green growth is different from traditional growth in that it does not take the motto "develop first, protect the environment later", but takes prevention, integration of environmental protection, and reduction of carbon emissions in production and business as a driving force for growth (Anh, H., 2018) [1].

Green growth is a content of Vietnam's Sustainable Development Strategy to ensure effective and sustainable economic development, while contributing to mitigating and preventing the impacts of climate change during the period. Currently.

Vietnam's Green Growth Strategy aims to promote the process of restructuring the economy, moving towards efficient use of natural resources, reducing greenhouse gas emissions through research and application of green technology. Modern and appropriate, develop infrastructure systems to improve economic efficiency, respond to climate change, contribute to hunger eradication and poverty reduction and create motivation to promote sustainable economic development. solid.

* The Goal of Industrial Restructuring

The first, maintain industry growth

To be able to maintain a fast and stable industrial growth rate in the long term, creating motivation to promote the development of other fields, it is necessary to implement some of the following main directions:

- Transform the economy from mainly broad-based growth to mainly in-depth development on the basis of effectively using advanced scientific and technological achievements to increase labor productivity and enhance competitiveness. Competition of goods and services, improving the efficiency of the economy in general and the efficiency of investment capital in particular.
- Shift the economy from exploiting and using raw resources to more sophisticated processing, increasing the added value from each unit of resource exploited. Gradually shift participation in external and international markets from raw products to refined processed products and services. Focus on improving the scientific and technological content of goods and services.
- Thoroughly save resources in development, effectively use scarce resources and limit consumption that encroaches on future generations.

The second, organize territorial space and reasonable industrial distribution

The principle of industrial distribution policy is to create a more reasonable industrial distribution space, stimulate industrial development while still harmonizing environmental benefits. Industrial distribution policy must focus on the following three major contents:

- 1. Focused development orientation, which distributes industry locally, continuing to plan industrial parks and export processing zones.
- 2. Creating sustainable industrial links: The goal is to create interconnected distribution and specialization in an environmentally friendly direction.
- 3. Relocation of facilities causing serious pollution: The goal is to contribute to improving and solving environmental problems left by history based on relocation combined with technological innovation.

The third, rational exploitation and economical and sustainable use of natural resources

Rational exploitation and economical and sustainable use of natural resources in general and mineral resources in particular is an indispensable content in the country's sustainable development program, and is a content that needs to be special priority, including activities on reasonable exploitation and economical and effective use of mineral resources, in which economical use is the key.

4. Research Results

4.1 Current Status of Industrial Restructuring in Vietnam

* About Macroeconomic Structure

The process of economic restructuring in Vietnam has achieved many outstanding achievements in recent times, from a purely agricultural country to now becoming a modern industrial country with an integrated structural shift. pole. The process of economic restructuring in general and within the industry in particular has undergone strong changes, gradually forming the electronics telecommunications industry-a key industry with industrial products. Key businesses have the ability to compete in the market following high technology trends. On the other hand,

in craft village areas, small and medium-sized enterprises have created a lot of labor, gradually promoting economic restructuring and rural labor structure.

Table 1: Vietnam's economic structure in the period 2018-2022

Unit: Billion VND

Yea	r	2018	2019	2020	2021	2022
Total sectors	Value	5.535.267	6.037.348	6.293.145	8.398.606	9.513.327
	Ratio (%)	100	100	100	100	100
	Value	1.573.806	1.723.577	1.732.819	2.680.216	3.050.017
Industry	Ratio (%)	28,4	28,5	27,5	31,9	32,0

Source: General Statistics Office, Report on socio-economic situation from 2018 to 2022

It can be seen that the economic structure in Vietnam has continued to shift in the right direction. Industry is always the leading sector and accounts for a high proportion (over 30%) in the GDP structure. Meanwhile, the agriculture, forestry, and fisheries sectors continue to decline in production scale and food output, so the proportion decreases from 3.82% in 2018 to 2.7% in 2022. The service sector only accounts for the highest proportion in the GDP structure.

* About Total Industrial Products

Total industrial product has continuously increased over the years and accounts for a high proportion in the total product structure. It can be seen that, in the period 2018-2022, the total industrial product across the country has continuously increased over the years and accounts for a fairly high proportion in the structure of total industrial products, of which the total industrial product reached 3,050,017 billion VND, an increase of 2 times compared to 2018. This on the one hand shows the stability in industrial development in Vietnam, on the other hand also shows that the industrial sector plays a quite important role in the economy. GDP structure. At that time, a change in the industrial sector will have a significant impact on the Vietnamese economy.

Table 2: Total industrial products in Vietnam at current prices divided by secondary industries in the period 2018-2022

Unit: Billion VND

Targets	2018	2019	2020	2021	2022
Whole industry	1.573.806	1.723.577	1.732.819	2.680.216	3.050.017
Mining and quarrying	408.227	405.797	349.425	203.148	268.076
Manufacturing	886.580	995.126	1.050.712	2.110.621	2.355.434
Electricity, gas, steam and air conditioning supply	250.806	291.464	298.903	317.159	380.092
Water supply; sewerage, waste management and remediation activities	28.193	31.190	33.779	49.288	46.415

Source: General Statistics Office, Report on socio-economic situation from 2018 to 2022

It can be seen that in Vietnam, the manufacturing and processing industry accounts for the largest proportion in the industrial structure (accounting for over 50%) and tends to increase. Second is the mining industry. Next is the production and distribution of electricity, gas, and hot water. The water supply, waste management and treatment sectors

account for a small proportion, but still tend to increase gradually. It can be seen that one of the potential factors threatening unsustainable development is excessive dependence on FDI enterprises. This is clearly shown when analyzing fluctuations in Industrial Parks in Vietnam. Including projects of large corporations such as: Canon, Samsung Electronics, Samsung Display. This is an important factor promoting the technological value content in the value of products, improving competitiveness, from that increases industrial production value and export turnover value.

However, this poses a high risk of "collapse" of the industry when there are fluctuations in the FDI sector and too much dependence on external factors leading to an unstable industry, poor sustainability.

* Regarding Industrial Production Index

Table 3: Industrial production index by secondary industry in the period 2018-2022

Unit: % **Targets** 2018 2019 2020 2021 2022 109,1 104,7 107,4 Whole industry 110,1 103,3 97,8 92,5 94,3 Mining and quarrying 100,9 105,5 Manufacturing 105,9 107,7 112,2 110,4 104,8 Electricity, gas, steam and air conditioning 110,0 108,5 103,1 104,5 107,0 supply Water supply; sewerage, waste management and 106,4 106,1 104,2 103,0 106,5 remediation activities

Source: Statistical Yearbook of Vietnam, 2023

The entire industrial production index in 2022 increases by 7.4% compared to 2021, higher than the increase of 4.7% in 2021 but much lower than the increase of 9.1% in 2019 and the increase of 10% in 2022. 1% of 2018; in which the processing and manufacturing industry increased by 7.7%, Electricity, gas, steam and air conditioning supply increased by 7.0% and Water supply; sewerage, waste management and remediation activities increased by 6.5%. The reason why the Manufacturing industry increased compared to 2018 is because a number of large corporations such as SDV Company, SEV Company, LG,... continuously research to launch new product lines to meet market demand in the coming time. Domestically and internationally, maintaining a stable growth rate, helping the electronic product manufacturing industry increase by 43.8% compared to 2018. In addition, a number of key industries also have high indexes. Compared to 2018, such as: drug production, pharmaceutical chemistry and medicinal materials (2 times higher); metal production (+34.5%); chemical production (+11.1%); Motor vehicle production (+11%). Contributed to the index of the processing and manufacturing industry increasing by 7.7%.

* About Industrial Production Value

Table 4: Industrial production value at current prices by economic type in the period 2018-2022

				Unit: billion VND
Year	Total	State	Non - State	Foreign invested sector
2018	2.426.400	630.142	1.361.156	435.102
2019	2.670.471	643.094	1.557.937	469.440
2020	2.803.065	734.735	1.605.050	463.280

2021	2.896.728	719.293	1.719.354	458.081
2022	3.219.807	824.657	1.873.209	521.941

Source: Statistical Yearbook of Vietnam, 2023

From 2018 to 2022, industrial production value increases continuously. In 2022, industrial production value at current prices will reach VND 3,219,807 billion, up 11.2% over the same period and up 32.7% over 2018; Of which the Foreign invested sector reached VND 521,941 billion, up 13.9% over the same period. This result shows that the foreign investment sector has invested heavily in the industry and brought high value to the economy.

4.2 Assessment of Industrial Restructuring in Vietnam 4.2.1 Achievements

* Regarding Territorial Spatial Organization and Industrial Distribution

Stemming from the advantage of its geo-economic position in Southeast Asia, Vietnam has organized its economic space, attracting investment from industry to create growth breakthroughs, including attracting new industries. High productivity of multinational corporations such as Samsung, LG, Canon, Foxcon. Thereby creating a convergence in the attractiveness of the business environment including market opportunities; quality of economic management; local images. According to the Ministry of Planning and Investment, as of December 2022, Vietnam has more than 400 industrial parks, including 4 export processing zones. The total natural area is nearly 130,000 hectares, of which the total industrial land area is more than 86,000 hectares, accounting for about 67%. Among these more than 400 industrial parks, there are more than 290 industrial parks in operation with nearly 93,000 hectares of natural land, and 115 industrial parks are in the stage of site clearance compensation and basic construction. There are 26 bordergate economic zones established in 21 provinces and cities with a total area of 766,000 hectares. There are 18 coastal economic zones established in 17 provinces and cities nationwide. Industrial parks and economic zones have attracted investment projects from 65 countries and territories, most notably investors from Korea (nearly 2,500 projects) and Japan (more than 1,500 projects). Singapore (nearly 450 projects). After more than 30 years of building and developing industrial parks and economic zones, Vietnam has helped attract large investment capital, accelerate the process of industrialization, modernization, and transformation of development space... Industrial parks Industries and economic zones across the country have created jobs for about 4.11 million direct workers, mainly concentrated in the Southeast and Red River Delta regions. Industrial parks attract large-scale projects from domestic and foreign investors. The number of investment projects with capital of over 100 million USD is about more than 500 projects, including some projects with investment capital of over 100 million USD. scale of over 1 billion USD such as: Investment projects of Samsung Group (Korea) in Bac Ninh, Thai Nguyen, Ho Chi Minh City with a total investment capital of 14.3 billion USD; Steel production project of Formosa Group in Vung Ang economic zone, Ha Tinh with a scale of 10 billion USD; PP plastic production project of Hyosung Group (Korea) with total investment capital of over 1 billion USD,... Especially in 2022, there are 3 electronic component production projects of LG Group (Korea) Investing in Trang Due industrial park, Hai Phong

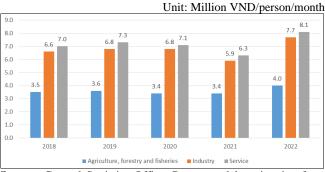
(located in Dinh Vu-Cat Hai industrial park), including LG Display, LG Electronics, LG Innotek with a total registered capital of 7.24 billion USD.

Export value reached 732 billion USD, of which the electronics industry of enterprises with foreign direct investment capital (FDI) accounted for more than 60%; Industrial park enterprises account for more than 30% of industrial production value. The development of industrial parks is the main factor contributing to the process of economic restructuring towards modern industry. Thereby, contributing to promoting the expansion of international economic relations with countries in the region and around the world, bringing Vietnam's economy to integrate more and more deeply into the global economy.

The results of attracting investment into industrial parks in Vietnam over the past 30 years confirm an open investment environment, building a unique image of each industrial park, leading to a chain of other satellite investors. Creating pervasive power, contributing to making Vietnam one of the leading countries in attracting investment, especially foreign direct investment in Southeast Asia.

With the above results, it can be affirmed that Vietnam has become a global electronics industry center with the "base" of the world's leading corporations. The Vietnamese brand is not only formed from outstanding achievements in economic development but more importantly is reinforced with traditional cultural cohesion; Economic development goes hand in hand with socio-cultural development, improving the material and spiritual life of the people.

* Contribute to Improving and Gradually Increasing Workers' Income



Source: General Statistics Office, Report on labor situation from 2018 to 2022

Fig 1: Average monthly income of workers by economic sector structure in Vietnam in the period 2018-2022

2022 will witness growth in most economic sectors, with workers' income increasing in all three economic sectors compared to 2021, in which the industrial sector recorded the highest income growth. The income of workers working in the industrial sector increased the most, up 17.6% (equivalent increase of 1.1 million to an VND/person/month. Some economic sectors have the highest rate of increase in average income per person). Labor growth is quite outstanding: workers working in the transportation and warehousing industry have an average income growth rate of 21.2%, equivalent to an increase of 1.6 million VND; the average income of workers in the industry Processing and manufacturing industries increased by 18.2%, equivalent to an increase of 1.1 million VND; income of workers in the automobile, motorbike, and motorbike repair industry increased by 17.2%, equivalent to an increase of 1.1 million VND. VND/person/month.

The results on the one hand show the positive roles of the FDI sector in Bac Ninh's economy, on the other hand also show the risks of unsustainability in the general economic structure and industrial structure in general. Particularly, because a change in FDI policy or a fluctuation in production in this area can disrupt the economic structure of Bac Ninh province when it depends too heavily on this area.

4.2.2 Shortcomings and Limitations

Besides the above achievements, the process of industrial restructuring in Vietnam still has some limitations:

Firstly, the economic structure is still shifting slowly, the industrial structure has not yet promoted the country's advantages.

It can be seen that industry is the main economic sector in Vietnam's economic structure (industry always accounts for over 30% of the country's economic structure). This shows that industry is the main economic sector contributing to the country's GDP growth. It can be seen that FDI has positively contributed to GDP growth and added an important source of capital for investment in the country's socio-economic development.

However, an industry that is considered a strength is changing in an unsustainable direction. The main cause of the above situation is:

- 1. Electronic product manufacturing industry accounts for a large proportion (over 50%), so it determines the growth of the industry
- 2. Production in the non-state sector shows signs of more difficulty in some traditional industries, such as iron and steel, wood, animal feed, garments.
- 3. Supporting industries develop slowly, the number of domestic enterprises participating in the value chain is small and lacks links.

Second, unbalanced industrial development leads to the province's traditional industries tending to disappear. In Vietnam, traditional craft villages play a very important role in the socio-economic development of localities. But currently, many craft villages are facing many difficulties, facing labor shortages, uncertain product output, and facing the risk of extinction. One of the reasons leading to the risk of extinction in traditional craft villages is due to labor shortage.

Currently, human resources in many craft villages (garment, rattan and bamboo weaving) are in short supply, especially young, highly skilled human resources. The reason why many workers, especially young workers, do not want to stick with the profession is because the nature of the job requires meticulousness, patience, takes a lot of time, and the income is not high. Therefore, the main workforce in traditional craft villages today is middle-aged and elderly, so work efficiency is not high. Along with the problem of human resources, the output market for products is also a challenge that affects the existence and sustainable development of craft villages. Most craft villages are slow to change their models, mainly household businesses, with few enterprise and cooperative models. That is the basic reason why craft villages are still fragmented, small, and have difficulty accessing loans, technology, and markets. Product quality is limited, designs are monotonous, not suitable for consumer tastes, prices are difficult to compete with similar products, on the other hand, most products do not have

trademarks... leading to It is difficult to expand and develop, many craft villages have only a few households maintaining moderate production.

Third, environmental pollution is increasingly serious on a large scale

Industrial development is the top task to realize the goal of industrialization and modernization of the country. However, the development of industries in recent times is one of the main causes causing the strongest impact on the environment, resources, health, safety and social order. Typically as:

Vedan Company discharged industrial waste into Thi Vai River in 2008, killing a series of seafood and the health of people in the surrounding area. This company discharged waste into the environment, arbitrarily increased the capacity of production areas by two to three times and did not have an environmental impact assessment report. After the above violations, Vedan Company was forced to stop all waste discharge activities and temporarily suspend production activities that generated wastewater and wastewater until remedial measures were taken. In addition, Vedan Company had to pay the costs of implementing measures to overcome environmental pollution and was responsible for compensating for economic damages. The company must be fully responsible for ensuring the rights of employees during the period of temporary suspension of production activities in accordance with current law. Although the Company has made efforts to resolve the consequences of the above violations, all of those contributions are not enough to compensate for the environmental damage that the Company has caused.

In 2020, La Nga Sugar Joint Stock Company in Dong Nai also had to temporarily suspend operations due to violating social responsibility, for emitting dust and exhaust gases exceeding prescribed levels and discharging wastewater into water sources, affecting the environment. Seriously affect people's health and lives. Or a series of violations by industrial clusters in Bac Ninh in 2021, these companies have committed acts of discharging wastewater in excess of environmental indicators; Production activities without a certificate of completion of environmental protection works; Periodic waste monitoring is incorrect and incomplete.

Specifically, Tien Manh Paper Production and Trading Company Limited; Thao My Paper Production and Trading Company Limited and Viet Tien Production and Trading Services Company Limited did not have an approved environmental impact report according to regulations.

5. Solutions to Promote Industrial Restructuring in Vietnam towards the Goal of Sustainable Development * Solutions to Attract Investment to Develop High-Tech Industries

Continue to attract investment in industries in the direction of diversifying products, focusing on industries with high technology content, improving product localization rate, being environmentally friendly, and consuming energy low, not laborintensive, aiming to gradually participate in the global value chain. Industrial construction reaches an advanced and modern level, products are highly competitive in domestic and foreign markets; Prioritize in-depth development of electronics industry, information technology, mechanical industry, and manufacturing. Expand the scale of pharmaceutical industry and food

- processing industry associated with raw material areas. Focus on developing supporting industries to serve key industries to create high value-added chains for industrial products within the province. Step by step towards the formation of linked industrial clusters on the basis of taking large enterprises as the core, small and medium enterprises as supply satellites.
- Focus on investing in improving the infrastructure of industrial zones and clusters, promoting investment attraction in a selective manner, prioritizing large-scale, less labor-intensive investment projects that produce products. with high technology content, clean technology, improving efficiency on 1 hectare of industrial area, creating a pervasive influence on economic development. Targeting businesses with technology from developed countries with high environmental standards, where there are strict regulations on environmental work; licensing business projects with modern, environmentally friendly technology, focusing on industries and fields that create products with competitive advantages, products capable of participating in production networks and global value chains, such as high technology, mechanical engineering, information and communication technology, pharmaceuticals, biological industry, environmental industry and industries using clean energy, renewable energy, new materials.
- Develop plans to develop a number of industries in the fields of information and communication technology; biotechnology; new materials industry; automation technology. Implement projects to develop supporting industries for high technology development in parallel with training human resources for the development of high technology industries.

In the long term, in addition to continuing to improve the investment environment to attract capital for economic development, there should be policies to improve the competitiveness of domestic enterprises, instead of just prioritizing investment in domestic enterprises. FDI enterprises. At the same time, promote investment promotion activities, promote the image of Vietnam and Industrial Parks, attract businesses that apply high technology and businesses that produce high-tech, environmentally friendly products. School. Closely and harmoniously combine industrialization and urbanization to quickly move toward modernization; increase the pervasive influence of the Industrial Park on other fields, making an important contribution to achieving the goal of harmonious and sustainable development between economy, society and environment.

* Solutions to Preserve and Develop Traditional Industries

Choosing to restore and develop craft villages and build infrastructure in industrial zones and clusters to create momentum and create an image to attract investment is also a unique direction in the coming time. Therefore, it is necessary to review and adjust industrial zones and clusters, giving priority to the development of craft village industrial clusters associated with preserving national cultural identity and ensuring ecological environmental protection. Continue to develop traditional industries with advantages in raw materials and human resources, in the direction of increasing the proportion of refined goods such as agricultural, forestry and food processing.

* Industrial Development Associated with Environmental Protection

Recent industrial development has created increasing pressure on the environment, and the risk of becoming industrial waste dumps is increasing. To gradually overcome and thoroughly treat environmental pollution, we must agree on the view that not for the sake of economic development or gain, it will negatively affect the ecological environment; It is necessary to integrate environmental protection in investment licensing and economic development planning; Strengthen inspection, examination, and strictly handle establishments and businesses that violate the law on environmental protection; Clearly define the responsibilities of leaders in environmental protection work. To do that, you need:

The first, promote propaganda, education, and awareness raising for the community and businesses about the impact of environmental pollution on people's health and the ecological environment. Encourage businesses and business establishments to use new cleaner technologies, optimally use raw materials, and reduce packaging and product packaging.

The second, improve the effectiveness of State management and the responsibility of heads of governments at all levels, departments, branches and organizations in environmental protection. Continue to strengthen the state environmental management system from central to local levels; Strengthen human resources for state management of environmental protection at all levels. Promulgate regulations and apply measures to prevent and handle acts that destroy or pollute the environment. Strengthen management and environmental management activities in industrial zones and clusters.

The third, it is necessary to focus on doing good planning work, especially planning urban areas, industrial parks and craft villages in the direction of modern urban areas; overcome and strictly handle violations of environmental pollution in craft villages and industrial parks, not letting traffic congestion and environmental pollution hinder local socio-economic development.

The four, strengthen inspection and examination work with focus and focus, and strictly handle with the highest forms the establishments and businesses that violate the law on environmental protection. Especially businesses in craft villages, industrial clusters, and businesses that intentionally violate and illegally discharge untreated waste, causing environmental pollution. Conservation of biodiversity; solid waste and hazardous waste management. Review sources of pollution in urban areas to take step-by-step treatment

Conduct an assessment of the current environmental status of all industrial parks and production facilities; Relocate irreparable environmental pollution production facilities from residential areas, towns and townships. Investment licensing targets clean projects. Industrial enterprises that save fuel and do not use a lot of cheap labor should also be given priority. Minimize licensing for fields with high risk of environmental pollution such as: Paper, textile dyeing, cement, steel. projects that are not in accordance with Vietnam's development planning, causing negative impacts. affecting the country's sustainable development orientation. The fith, regarding environmental pollution in craft villages: it is necessary to build a craft village wastewater treatment system, apply technical advances using Biogas to run

electricity generating engines, contributing to energy saving, treating environmental pollution in concentrated livestock facilities, building a model of domestic wastewater treatment in urban areas and rural areas applying improved EBB technology. Besides, it is necessary to apply Applying technical advances, creating sample models and point models to treat environmental pollution according to each appropriate group of craft villages.

5. Conclusion

Economic restructuring in general and industrial restructuring in particular is an inevitable trend and an appropriate step in the current context. As a province with many potential advantages in industrial development with a high proportion (always accounting for over 30% of the economic structure), with diverse industrial products ranging from high-tech industrial products. to traditional industrial products, Vietnam needs to have appropriate policies and steps to maximize the potential and advantages of this area in the province's socio-economic development strategy to ensure direction for sustainable development in the future.

6. References

- 1. Anh H. Green growth towards a green economy and sustainable development. Communist Magazine, 2018.
- 2. Bac N. Research on the issue of sustainable industrial development in Thai Nguyen province. Doctoral thesis in economics-National Economics University, 2010.
- Ha N. Economic restructuring towards sustainable development in Vietnam. Doctoral thesis in economics, University of Economics-Hanoi National University, 2014.
- 4. Thang B. Economic sector restructuring in Vietnam. Social Sciences Publishing House, Hanoi, 2006.
- 5. National Dictionary Compilation Center. Vietnam encyclopedia. National political publishing house, Hanoi. 1995; 1.
- 6. General Statistics Office. Report on socio-economic situation, 2018, 2019, 2020, 2021, 2022.
- 7. General Statistics Office. Statistical Yearbook of Vietnam, 2022.