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Solutions for sustainable industrial development in Quang Ninh Province

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Abstract

Industrial development plays an important role in the socio-economic development of localities. Quang Ninh, Vietnam has a lot of potential for industrial development, but industrial development in Quang Ninh, Vietnam must be placed in relationship with tourism development to fully exploit the province's tourism potential. This raises the need for sustainable industrial development to ensure both sustainable economic development and sustainable cultural, social and environmental development to support the province's tourism development. This article was conducted to evaluate the current state of industrial development in Quang Ninh province, Vietnam in a sustainable direction and propose solutions for industrial development of the Province. The content of sustainable industrial development is approached in the direction of using criteria to evaluate the level of sustainability of industrial development with 3 groups of criteria: criteria for evaluating economic sustainability, criteria for evaluating development, socio-culturally sustainable industry and criteria for evaluating environmentally sustainable industrial development.

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1. Introduction

Industry is the largest material production sector of the national economy, with an important position and role in the economic development of countries and localities globally. Industrial development is considered an effective solution to industrialize and modernize the economy, support the development of agriculture and service trade, create jobs, and increase income. However, the process of industrial development in many countries around the world has revealed limitations and inadequacies that damage the environment, harm the balanced development of people, and thereby affect human health, sustainable development of the world economy. Therefore, sustainable industrial development has become the goal of many countries and localities around the world.

Quang Ninh, Vietnam is known as the gateway to the Northern key economic region, the growth pole of the Northern region with great potential for socio-economic development. With the advantage of geographical location, natural landscape and twice being recognized by UNESCO for its aesthetic, geological and geomorphological values in Quang Ninh, Vietnam has become one of the four major tourist centers of Vietnam. To focus on tourism development, in addition to preserving and promoting the value of tourist landscapes, Quang Ninh, Vietnam implements the policy of sustainable and inclusive tourism development, on the foundation of green growth, to truly make tourism a key economic sector of the province. Therefore, Quang Ninh, Vietnam determined that there needs to be a close combination between industry and agriculture with tourism development to create sustainable development of the province, especially the combination of industry and agriculture, tourism. To develop green tourism, the province's industry needs to properly resolve the conflict between industrial development and tourism development, specifically the issues of environmental pollution, damage to natural landscapes, and imbalance, in development, damage to the environment, health and future human development potential caused by the negative impacts of industrial development. Therefore, sustainable industrial development of the Province is an essential need, playing an important role in the province's

socio-economic development. This article was conducted to analyze the current state of sustainable industrial development in Quang Ninh province, Vietnam and propose solutions for sustainable industrial development in the province. The content of the article is divided into three parts: (i) overview of sustainable industrial development; (ii) current status of sustainable industrial development in Quang Ninh province, Vietnam; (iii) solutions for sustainable industrial development in Quang Ninh province, Vietnam.

2. Approach

According to Decision No. 27/2018/QĐ-TTg issued on July 6, 2018 of the Prime Minister on Vietnam's economic sector system, industry is the material production industry, including the following activities: (i) exploit material wealth available in nature; (ii) processing of exploited products and processing of agricultural products; (iii) repair of machinery, equipment and consumer goods. Accordingly, the industry is divided into four sub-sectors including mining industry; manufacturing and processing industry; industrial production and distribution of electricity, gas, hot water, steam and air conditioning (referred to as electricity production and distribution); and water supply; waste and wastewater management and treatment activities (referred to as water supply and waste treatment). Industrial development is the increase in quantity and quality of industrial growth associated with shifting industrial structure in a progressive and reasonable direction. Industrial development aims at the major goal of increasing industrial production value and shifting industrial structure towards sustainability. Industry is always the basic material production sector of society, so industrial development creates great motivation and spillover power to promote economic growth and develop a civilized and modern society. However, the process of industrial development also has negative impacts on people's health, culture, and living environment, so there is a need for a harmonious combination between industrial development and health protection, culture, human living environment or in other words, sustainable industrial development. That is to develop industry in a stable and sustainable manner on the basis of ensuring balance between economic growth, harmoniously solving socio-cultural issues and environmental protection. The essence of sustainable industrial development is sustainable industrial development in terms of economy, culture, society and environment. *Economically sustainable industrial development* must create real income increases, increase social production, eliminate poverty, and ensure fast, stable, and economically efficient growth. *Socio-culturally sustainable industrial development* is industrial development that combines economic growth with socio-cultural stability, without conflict, disturbance, or disorder; Maximize and effectively mobilize resources for the development process; ensure good resolution of issues of education, health care, employment, income equality, and social welfare among population groups and between territorial areas; Build, protect and promote current social standards based on religion, preserving good traditions, customs, traditions, beliefs, national cultural identity, ethics and law. *Environmentally sustainable industrial development* is industrial development associated with utilizing and regenerating resources and energy, preventing and minimizing environmental pollution, protecting diversity and balancing the ecosystem; ensure the human living environment. Sustainable industrial development is evaluated

through basic criteria:

(i) Group of criteria for evaluating economically sustainable industrial development, including:

+ *Industrial development speed*

Growth rate reflects the increase in the scale of total industrial product in the following cycle compared to the previous cycle, determined by the percentage increase/decrease between the value of total industrial product created in the previous cycle, compared to the value of total industrial products of the previous period.

$$\text{Speed}_{\text{develop industry}} = \frac{\text{Value of total industrial product cycle } n}{\text{Value of total industrial product in period } n-1} \times 100$$

+ *Proportion of industry in total product*

The proportion of industry (industry's contribution ratio) in total product is determined by the value of industrial production over total product. The higher this value proves the important position of the industry in the economy.

$$\text{Industry proportion}_{\text{industrial}} = \frac{\text{Value of total industrial products}}{\text{Total product value of the whole province}} \times 100$$

(ii) *Criteria for evaluating socially sustainable industrial development*

+ *Proportion of industrial workers in the total number of workers*

This criterion evaluates the industry's achievements in creating jobs for workers indicating the level of participation in creating jobs and income for the population.

$$\text{TB rate}_{\text{industry movement industry}} = \frac{\text{Number of workers in industry}}{\text{Number of employees in the whole province}} \times 100$$

+ *Number of industrial enterprises and development of the number of enterprises*

$$\text{Speed}_{\text{Industrial enterprises develop}} = \frac{\text{Number of industrial enterprises in year } n}{\text{Number of industrial enterprises in year } n-1} \times 100$$

+ *Average income and increase in income of workers in the industry*

Labor income in the industrial sector is all sources of income received in cash from labor on a monthly or yearly basis reflecting the sustainable poverty reduction trend of workers in the industrial sector. The steady increase in average income reflects sustainable industrial development.

(iii) *Criteria for evaluating environmentally sustainable industrial development*

+ *Environmental assessment criteria (soil, air, water) at industrial facilities are within the allowable threshold.* Depending on the industry these criteria are regulated differently requiring industrial enterprises to build waste collection and treatment systems from the production process to ensure the threshold environmental criteria for permission.

+ Number of cases causing environmental pollution in industrial production. Every year the authorities will conduct inspections of industrial production facilities to detect cases of environmental pollution in industrial production. The fewer cases of environmental pollution the more sustainable development becomes.

3. Results and Discussion

Current status of sustainable industrial development in Quang Ninh province

Quang Ninh Province, Vietnam has rich natural conditions and minerals that facilitate industrial development, especially mining and energy industries. Quang Ninh, Vietnam has large coal reserves - about 3.6 billion tons, mostly anthracite, stable carbon rate of 80 - 90%, accounting for 90% of Vietnam's coal reserves.. Quang Ninh, Vietnam also has many mineral water points in Quang Hanh (Cam Pha), Khe Lac (Tien Yen), Dong Long (Binh Lieu), and Cam Pha that can be exploited for drinking or treatment. In addition, Quang Ninh has raw materials for the production of construction materials, providing supplies and raw materials for various domestic and export industries such as coal mining industry and material production industry. Ship construction and repair, shipbuilding industry... make an important contribution to the economic development and GRDP growth

of the Province. Quang Ninh, Vietnam is also known as the country's energy center, one of the wind power and LNG gas power centers of the North. Due to its favorable geographical location, bordering the border, having a seaport system, logistics services, industrial parks, waterway and road transportation, Quang Ninh, Vietnam has favorable conditions to attract investors, foreign investment to develop industrial parks. In the development strategy, Quang Ninh, Vietnam has issued many policies to develop the province's industry, especially the transformation of the socio-economic development model from brown to green and the development of development planning, local socio-economic. This is the potential for sustainable industrial development of the Province.

Regarding the results of sustainable industrial development, basically, Quang Ninh and Vietnam have had certain achievements in all three aspects of sustainable industrial development in terms of economics, culture and society and environment. Detail:

+ *Economically sustainable industrial development*

- *Regarding the annual industrial development speed:* The industry of Quang Ninh province, Vietnam has quite and steady growth in the period 2011 - 2021, reaching an average of 7%/year, the growth rate tends to increase day by day, even higher, the highest in 2020 reached 14.59%, specifically:

Table 1: Development speed of industries in Quang Ninh province according to 2010 comparative prices, period 2011-2021

Development speed	2011	2012	2013	2014	2015	2016	2017	2018	2019	2020	2021
The whole province	110.8	104.2	106.2	108.1	109.9	110.2	110.1	111.5	112.86	109.21	110.28
Industry	110.4	102.2	102.7	105.7	105.61	100.88	103.77	108.94	112.86	109.23	114.59
Mining industry	114.3	93.9	95.6	94.7	103.84	97.13	99.77	108.39	111.72	105.56	106
Manufacturing and processing industry	112.7	99.5	112.3	110.7	108.5	119.13	104.98	111.61	111.82	117.91	132.19
Manufacturing industry electricity water gas.	157.8	151.4	116	135.8	137.21	120.4	105.1	108.9	114.9	108.39	104.25
CN provides water and waste treatment	121.8	178	112.3	81.9	105.32	103.59	109.56	108.05	107.34	107.89	106.45

Source: Department of Statistics of Quang Ninh province

Stable industrial growth has made an important contribution to the province's overall growth. In the industrial structure the mining industry has the slowest growth rate with a growth rate of less than 100% in many years. This fact is consistent with the province's industrial development goal of converting from "brown" industry to "green" industry. The mining industry is the industry with the highest level of negative impact on the environment and tourist landscape. Restrictions on this industry make an important contribution to ensuring a balance between economic development and conservation environmental protection.

The good news in the province's industrial development is that the growth rate of the manufacturing and processing industry is increasing. The bright spot in the province's industrial development is that the growth rate of the manufacturing and processing industry in 2021 will reach an increase rate of 32.19%. The outstanding growth rate of the processing and manufacturing industry in Quang Ninh in 2 years (2020, 2021) is due to the addition of more and more enterprises producing televisions speakers and woven fabrics

from fiber. Synthesis hat body.... belonging to the S-Vietnam Project of Foxconn Group, Tonly Vietnam Electronic Engineering Company, Bumjin Electronics Co., Ltd., Weitai Ha Long Textile and Garment Co., Ltd.... From then on, making increase the added value of this industry, becoming the industry that contributes the most to the growth of the industrial - construction sector as well as the overall economic development speed of the Province.

- *Regarding the contribution of industry to the total product of the province:* Industry develops stably and always contributes to the total product of the whole province at a high level of 42.8 - 52.8% of the total product of the whole province. Especially in 2021 industrial production value accounts for 52.8% of the Province's GDP. The proportion of industrial production accounts for a large proportion of GDP and has an increasing trend showing the province's sustainable industrial development trend. Along with the speed of development of the processing and manufacturing industry in Quang Ninh province, Vietnam has a tendency to develop sustainably and long term in the future.

Table 2: Value of industrial products of Quang Ninh province 2010-2020

Unit: billion VND									
Targets	2011	2015	2016	2017	2018	2019	2020	2021	
Total products of the whole province at current prices	50.097	113.908	127.229	143.068	166.271	194.132	219.378	241.93	
Industrial and construction production value at hh price	26.09	56.049	62.345	68.553	80.203	97.127	113.993	130.61	
In which: Industrial production value at current prices	24.017	50.855	56.264	61.186	71.223	86.349	100.828	127.74	
Occupying the proportion of the province's total product (%)	47.9	44.60	44.2	42.8	42.8	44.5	46.0	52.8	

Source: Department of Statistics of Quang Ninh province

Assessing socio-cultural and sustainable industrial development

Regarding the number of industrial enterprises: The number of industrial enterprises in Quang Ninh is increasing from 403 enterprises in 2010 to more than 1.000 enterprises in 2021 the number of industrial enterprises is 2.48 times higher. In particular, the number of enterprises in the processing and manufacturing industry accounts for over 80% of the total number of enterprises in the province with more than 800 enterprises (in 2021). Quang Ninh also attracts many large FDI projects such as the Household appliance and electric bicycle factory project of Multi-Sunny Vietnam Co., Ltd. (10 million USD); Lioncore Vietnam Factory of Lioncore Vietnam Industry Company Limited (30 million USD); Haiyun Vietnam project of Hai Van Co., Ltd. (10 million USD); Garment factory project at standard factory area No. 2 of Hoa Loi Dat Vietnam Garment Co., Ltd. (8 million USD); Jingsung Hitec Vina Co., Ltd project of Jinsung Vina Co., Ltd. (over 13 million USD).

- Regarding attracting the labor force: Quang Ninh province's industry contributes significantly to employment for workers. The number of industrial enterprises in Quang Ninh province accounts for about 15% but has the ability to create jobs for 60 - 70% of the province's workforce. Through its ability to

create jobs. Quang Ninh Province's industry has contributed to stabilizing jobs stabilizing people's lives maintaining security and stabilizing social order. In addition, the mineral exploitation industry and processing and manufacturing industries attract workers in large numbers. In 2020, Quang Ninh ranked 12th in the country in attracting workers to work in businesses with 237.058 people.

- Regarding employee income: According to the "2022 White Book for Vietnamese Enterprises" the average monthly income of employees in enterprises in Quang Ninh province in 2021 will reach 10.3 million VND/month; ranked 4th in the country. The income of workers in industrial enterprises is always more stable than that of enterprises in other industries in the Province. Regarding income by industry workers in the waste treatment industry have an income level equal to the average income of the province; Labor in the mining industry is 1.35 times the average income; Labor in the electricity and gas production and distribution industry is 1.54 times higher than the general average income. Regarding labor efficiency in enterprises, the period 2011 - 2015 only reached 13.0 while in 2020 it reached 20.0.

Table 3: Average monthly income of industrial workers in Quang Ninh province *Unit: (thousand VND)*

Criteria	2014	2015	2016	2017	2018	2019	2020
<i>Shared</i>	7.065	6.922	7.82	8.235	9.441	10.023	10.209
Mining industry	9.265	9.709	10.565	10.503	12.56	14.316	13.832
Manufacturing and processing industry	5.995	6.147	6.549	6.95	7.743	8.64	9.041
Manufacturing industry electricity supply.	10.02	11.416	12.001	15.45	18.087	13.999	15.647
Water and waste supply industry	6.161	6.246	7.075	8.494	5.736	7.473	7.996

Source: Quang Ninh Provincial Statistics Department. 2021

Assessing environmentally sustainable industrial development

To ensure sustainable environmental development for tourism development as well as for the general development of people in Quang Ninh province. Vietnam has synchronously implemented many different solutions such as: economic restructuring from giving priority to the mining industry to the manufacturing and processing industry; transforming the growth model from "brown" to "green"; propagate and raise awareness for businesses and workers; application of clean science and technology; inspect and examine the compliance and implementation of policies and laws on environmental protection by industrial enterprises. In addition the Province has also made many efforts to escape dependence on coal mining industries develop other industries that are more diverse do not cause pollution and create products that mainly meet the needs of consumers needs of the people in the province. The inspection and supervision of businesses and industrial facilities on wastewater and waste treatment has contributed positively to reducing the number of environmental pollution cases and protecting a clean green environment for the Province. Although many achievements have been achieved in sustainable industrial development industrial development in Quang Ninh province. Vietnam still has some limitations such as attracting investment capital (especially FDI capital). The province's industrial parks are still limited; The portrait of key industries and spearhead industries is unclear; The distribution and planning of industrial parks is still general not promoting the strengths of each region; The competitiveness of the province's industrial enterprises is not

high. Regarding sustainable industrial development in the socio-cultural aspect the current limitation is that the activities of industrial enterprises affect the preservation of monuments and history of the surrounding area affecting cultural development and travel; Cultural development activities of industrial enterprises are still heavy on movement-based forms not yet flexible and adaptable to new demands of the population. Regarding the environment ensuring a balance between industrial development and environmental protection remains many challenges; The overcoming of environmental pollution in some factories and industrial facilities in the past was still slow; Waste treatment and environmental protection issues in the mining industry are still difficult.

Solutions for sustainable industrial development in Quang Ninh province

Firstly build and implement an industrial development strategy to promote the Province's advantages

In the current context the 4.0 industrial revolution has a profound impact on industry globally. Applying the achievements of the 4.0 industrial revolution in industrial production in Quang Ninh. Vietnam will create advances in industrial production such as smart manufacturing robots artificial intelligence and Internet of Things (IoT).). In addition, Quang Ninh has many advantages for industrial development such as coal resources infrastructure markets and mineral resources. To take full advantage of industrial development as well as accelerate the application of

industrial revolution 4.0 achievements in industrial production. Quang Ninh. Vietnam needs to build and implement an industrial development strategy that promotes advantage of the Province. Detail:

+ Develop advantageous industries of the province such as coal electricity cement and construction materials in the direction of promoting research and application of advanced production technology to minimize impacts on the environment and improve quality working conditions for workers. The coal electricity cement and construction materials industries not only cause great environmental pollution but also damage the health of workers. However this industry contributes significantly to the industrial production value of Quang Ninh. Vietnam. Therefore eliminating these industries from the province's industrial structure is not possible. Instead, Quang Ninh should focus on investing resources (especially financial resources and human resources) for research and development and application of advanced and modern technology to minimize negative impacts from climate change these days. In addition, Quang Ninh. Vietnam should focus on industries that support the province's tourism development such as food production and processing soft drink and beverage production handicrafts and food products medicinal herbs export. Quang Ninh can take advantage of the available tourist output market to develop these industries.

+ Prioritize the development of key industries such as mechanical engineering (manufacturing cars, motorbikes, machinery and equipment for agriculture, construction...); power electronics; High-tech, modern products new materials. Quang Ninh. Vietnam has advantages in transportation infrastructure favorable geographical location and dynamic economic development so it easily attracts foreign investment. Furthermore the international context has many changes affecting international investment trends such as shifting the supply chain away from China the complicated international geopolitical situation and cheap human resources are no longer the only advantage then Vietnam in general and Quang Ninh in particular will have more advantages in attracting FDI flows. Therefore the Province should prioritize investment promotion activities and administrative reforms to seek Large investors in the field of electricity and electronics use advanced technology with little environmental pollution. Attracting investment in these industries not only creates sustainable economic development but also creates sustainable environmental and social development.

Develop supporting industries consistent with the industries following the province's development orientation especially key industries. When shifting the industrial development strategy towards focusing on industries in which Quang Ninh and Vietnam have advantages or the province's key industries the industry also needs to shift accordingly to create synchronization in the industry industrial development strategy. Quang Ninh. Vietnam needs to prioritize major supporting industries such as electricity and electronics; extractive; processing agricultural and aquatic products or new materials.

Taking advantage of geographical location to develop the logistics industry turning Quang Ninh into one of the large modern logistics centers of the country. Quang Ninh. Vietnam should focus on connecting transport infrastructure developing warehouse systems seaports and services for transporting loading and unloading and customs clearance of

goods to develop logistics to take full advantage of the advantages. The province's logistics include having seaports (Hon Gai, Cai Lan, Bai Chay....) having a favorable geographical location having nearly synchronous transport infrastructure connecting the region and the area and having an open-door policy. In addition, Quang Ninh. Vietnam should have policies to encourage and support businesses operating in the field of logistics and develop human resources for this field.

Second change the growth model from "brown" to "green" growth in industrial development

Changing the growth model from "brown" to "green" is a common strategy chosen by many countries and localities. However how to transform depends on the characteristics of each industry and each specific locality. Industrial development in Quang Ninh. Vietnam must be placed in correlation with tourism development and environmental protection so the need to transform the development model from "brown" to "green" is even more urgent. First of all, Quang Ninh. Vietnam needs to create a change in awareness of local authorities business owners and industry personnel about the necessity of this shift. Next promulgating mechanisms and policies for transforming the growth model is also very important. Quang Ninh Provincial Party Committee. Vietnam issued Action Program No. 23-CTr/TU dated June 28, 2018 of the Provincial Party Standing Committee to implement Resolution No. 23-NQ/TW of the Politburo dated March 22, 2018, 2018 on orientations for building national industrial development policies to 2030 vision to 2045. This program needs to continue to be implemented controlled and evaluated. In addition it is also very important to incorporate the content of the green industry development strategy into the specific plans and plans for socio-economic development of the province in each period. For the "green" industrial development model to be implemented in Quang Ninh. Vietnam building an industrial development strategy is very important because it guides all efforts of the entire province in implementing development goals. "green" industrial development. This strategy includes policies solutions and resource plans for sustainable industrial development. Solutions in the "green" industrial development strategy include:

- Invest in local industrial development focusing on clean industry using high levels of knowledge and technology such as electronics industry supporting industry and processing industry. This is a central and key solution in green industry development.
- Attract investment in technological innovation in the mining industry such as coal mining thermal power and construction materials in a green clean and sustainable direction.
- Develop supporting industries for high-tech agricultural development
- Develop clean energy industry renewable energy and new energy to ensure national energy security and ensure the implementation of green growth goals.

Third develop industrial enterprises and improve their competitiveness in the market. This is an important and key solution to create sustainable industrial development in the Province because industrial enterprises are the subjects that create sustainable development; Strategies institutions and policies only create a supportive environment for that development. Industrial enterprises that have a correct

awareness of sustainable development and a full understanding of the opportunities market potential and benefits of sustainable development can adjust their production and business activities in the direction of sustainable development sustainable. On that basis industrial enterprises in Quang Ninh province need to clearly define their business goals on the basis of affirming the mission vision and core values that the enterprise pursues. Next industrial enterprises in Quang Ninh and Vietnam need to develop specific strategies and business plans based on fully analyzing the business environment and understanding market needs. Building an effective corporate governance system is also an important solution because it helps businesses attract and effectively use resources for sustainable development. Improving product quality and building a strong brand in the market will help businesses have the opportunity to compete long-term in the marketplace. In addition continuous innovation and creativity for sustainable development is also an important solution for industrial enterprises in Quang Ninh, Vietnam.

To develop industrial enterprises and improve their competitiveness in the market. Quang Ninh Province, Vietnam can have certain support policies. On the one hand, Quang Ninh, Vietnam actively attracts foreign investment to create a bright spot for the province's industrial development. On the other hand it improves business efficiency of domestic enterprises through creating a business environment and conditions favorable for businesses. At the same time, Quang Ninh and Vietnam need to research appropriate and legal support policies for the province's industrial enterprises focusing on large enterprises and high-tech enterprises that can promote Industrial advantages of the Province.

4. Conclusion

Industry is the economic backbone of countries and localities in line with the trend of industrialization modernization and the development of industry 4.0. Sustainable industrial development will help Quang Ninh Vietnam both develop industry protect the environment and develop tourism services. The article analyzed the current state of industrial development in the Province according to sustainable development criteria. Through that the article has some solution orientations for sustainable development of the province's industry. The article provides important practical information to build industrial development strategies and policies of Quang Ninh province, Vietnam towards the goal of sustainable development.

5. References

1. Quang Ninh Provincial Statistics Department. Quang Ninh Provincial Statistical Yearbook 2020. Statistics Publishing House. Hanoi, 2021.
2. Quang Ninh Provincial Statistics Department. Quang Ninh Provincial Statistical Yearbook 2021. Statistics Publishing House. Hanoi, 2022.
3. People's Council of Quang Ninh province. Resolution No. 32/2010/NQ-HDND dated December 10. 2010. on environmental management and protection in Quang Ninh province, 2010.
4. People's Council of Quang Ninh province. Resolution on policies and solutions to strengthen environmental protection in Quang Ninh province in the period, 2015, 2016-2020.
5. People's Council of Quang Ninh province 59/NQ-

- HDND. Resolution 59/NQHDND on approving investment policies for public investment projects with capital from the budget of Quang Ninh province, 2021.
6. People's Council of Quang Ninh province 108/NQ-HDND. Resolution 108/NQ-HDND on approving Quang Ninh province planning for the period 2021-2030 vision to 2050. July 9. 2022
7. Prime Minister. Decision No. 2622/QD-TTg. Approving the master plan for socio-economic development of Quang Ninh province to 2020 vision to 2030, 2013, 1-15.
8. Prime Minister. Decision No.: 403/QD-TTg dated March 14. 2016 on approving the adjustment of Vietnam's coal industry development planning to 2020 considering the outlook to 2030, 2016.
9. Prime Minister. Decision No. 1265/QD-TTg. dated August 24. 2017 on approving and adjusting the development plan of Vietnam's coal industry until 2020 taking into account the future prospects 2030 (adjusted), 2017.
10. General Statistics Office. Vietnam Business White Paper 2022. Hanoi, 2022.