

Financial policies to develop green economy: International experience and lessons for Vietnam

Ta Minh Hà Faculty of Business Administration, Trade Union University Vietnam

* Corresponding Author: Ta Minh Hà

Article Info

ISSN (online): 2582-7138 Impact Factor: 5.307 (SJIF) Volume: 05 Issue: 02 March-April 2024 Received: 05-01-2024; Accepted: 06-02-2024 Page No: 28-33

Abstract

To achieve the goal of a green economy, countries need to review, research, and develop appropriate economic and social policies, in which financial policy is the key, to decide the success or failure of the economic growth model transformation. Some countries in the world have succeeded in formulating and implementing financial policies to develop green economies such as the US, Korea, China, Singapore, and Japan. Meanwhile, Vietnam has issued many financial policies aimed at a green economy, however, in the process of implementation, these policies have also revealed some limitations. This study has focused on clarifying the theoretical basis, and international experience, analyzing the current situation of financial policies to develop a green economy in Vietnam, thereby proposing solutions on financial policy to accelerate the process of greening Vietnam's economy.

Keywords: International experience, financial policy, Green economy

1. Introduction

Faced with the complicated developments of climate change and the risk of resource depletion, most countries in the world, including Vietnam, consider green economic development to be an inevitable step in their economic development strategies. Fiscal policies focused on the green economy are development-oriented and help promote investment in major projects and infrastructure related to climate change and global environmental sustainability.

Fiscal policy can reduce economic distortions and harness market forces to achieve green economic goals such as reducing environmental pollution and improving human health and the economy. A more efficient economy with fewer market distortions, greater domestic revenue mobilization, improved social welfare, incentives for green jobs, and an energy-efficient economy. In Vietnam, economic growth has entailed the use of labor, natural resources, and capital, leading to low efficiency in real-world resource and energy use, as well as increased levels of air pollution, gas, water, and soil pollution, continuously increasing greenhouse gas emissions. Vietnam has also issued many financial policies to develop a green economy, however, during the implementation process, these policies have also revealed some limitations. Meanwhile, financial policies in some countries have achieved certain success such as the US, Korea, China, Japan, and Singapore. Learning from experiences from these countries will help improve financial policies that impact progress towards a green economy in Vietnam

2. Theoretical Base and Research Methodology

2.1. Theoretical basis

Green economy

Many domestic and international studies consider the green economy from many different angles. A green economy is an economy in which green economic growth and sustainable development are harmoniously and closely combined. "A green economy is an economy that improves people's lives and improves social equity while minimizing environmental risks and ecological deficits" (Armand Kaszterlan, 2017).

The World Bank (WB, 2012) defines a green economy as "ensuring the efficient use of natural resources, minimizing pollution and environmental impacts, and increasing resilience to changes in the environment." nature ensures that the country's commitment to the environment and nature is "economic development", promoting the role of state management of the environment and natural resources in preventing disasters from nature".

A green economy can be viewed from many different angles, but basically, a green economy is an economy that reduces greenhouse gases, protects the environment, and stimulates the efficient use of resources based on applying modern science and technology to develop and improve people's lives. In a green economy, environmental resources are an important factor for economic development, improving value chains, and bringing long-term stability and prosperity. Environmental protection, sustainable management and use of natural resources, and combating climate change are considered important topics of the green economy. The government and private sector are focusing on prioritizing investment in economic activities, infrastructure, and works that contribute to achieving the goal of reducing pollution and carbon emissions; improving resource and energy use efficiency; prevent loss of biodiversity and environmental services.

From the above studies, we can draw several characteristics of a green economy, including: i) A green economy is an economy that aims to develop, reduce greenhouse gas emissions, and respond to climate change. ; ii) a green economy is an economy that exploits and uses resources effectively; iii) A green economy is an economy that applies advanced, environmentally friendly technology

Financial Policy

According to the Report of the Organization for Economic Co-operation and Development (OECD) on financial policy: "Financial policy refers to policies related to the management, supervision, and supervision of financial markets financial and monetary policy, including markets and institutions, to ensure financial stability, develop markets, and protect customers, assets and consumers". In this study, financial policy is approached with the understanding that policy is a set of goals, methods, guidelines, and actions to implement the goals set by the government. National financial policy is a part of economic policy, it uses the overall tools of the financial system to exploit, mobilize, and effectively use the country's financial resources to serve the needs of the country service for socioeconomic development.

Financial policies to develop a green economy (Tran Thi Quynh Hoa, 2021) are measures and policies designed to encourage and support environmentally friendly business and production and consumption activities and limit negative impacts on the environment. Financial policies to develop a green economy help support environmentally friendly production and business activities while helping to increase productivity and resource use efficiency, and promote industrial innovation, technology and improve the quality of life for the community.

To develop a green economy, countries always have a policy system based on perspectives and goals to develop a green economy in each period and each stage. To develop a green economy, countries need to establish new institutional arrangements, overcoming current institutional inertia and gaps in policymaking. Issues that need to be resolved in the economy will be identified first, then countries will determine policies to remove difficulties to develop a greener, more sustainable economy. To develop a green economy, "green economy" must be integrated into policies. Some financial policies include: i) Financial support policies for environmentally friendly production and business activities such as financing renewable energy projects, reducing emissions, and treating wastewater, while recovering, recycling, and treating waste; ii) Implement policies to encourage the use and production of environmentally friendly consumer products by increasing taxes on products that pollute the environment and reducing taxes on green products; iii) Support programs to reduce emissions, improve resource use productivity, and increase resistance for organizations and businesses affected by climate change; iv) Encourage environmentally friendly business activities by providing preferential financing and investing in green business projects; v) Implement legal policies and regulations on environmental protection and assess the impact of business activities on the environment.

2.2. Research Methods

The article uses a combination of many different research methods, specifically as follows:

Theoretical research method: collect scientific information based on studying existing documents and materials related to financial policy and green economy, creating a new complete theoretical system, synchronized. Based on systematizing financial policies according to the goals of developing a green economy, arranging research content into an orderly, logical system, and clarifying the content with full goals more complete and comprehensive.

Qualitative research method: based on the role of financial policies and characteristics of the green economy, provide comments on the impact of financial policies on the green economy.

Statistical method: statistics and synthesis of data on economic development and financial policies as a basis for analyzing the current state of financial policies for green economic development in Vietnam

Research method: research countries' experiences on financial policies to develop a green economy to draw lessons for Vietnam, as a basis to propose solutions to improve financial policies to develop the economy in Vietnam.

3. Financial policy to develop the green economy in some countries around the world

3.1. American experience

The US is an early country to green the economy and lead the global green economy. Recently, the US Government has implemented long-term deflation goals and implemented policies to develop a green economy through energy saving combined with renewable energy policies, reducing minimize environmental pollution. Overall, the above policies are important drivers for climate action. Efforts to reduce the cost of renewable energy, advances in technological development, and corporate change have stimulated America's green economy. Recently, the US Government has spent many large investments on projects to upgrade and modernize the power grid, electric vehicle infrastructure, renewable energy, energy conservation, and efficient use of hydrogen energy, collect CO2, and increase adaptation and resilience to climate change... (US Green Economy, 2021). With what has been achieved, the green

economy in the US is promoting economic growth and creating jobs for people. According to research by Georgeson & Maslin, America's green economy generates an estimated \$1.3 trillion in annual sales, while employing more than 9.5 million full-time workers (Stevens, 2019)^[7].

3.2. Korean experience

Korea is a country with similar starting points and conditions to Vietnam. Financial policy to develop Korea's green economy is formed by macro strategies and policies of each industry and each stage with consistent, specific, and feasible content. Korea aims to become one of the top 5 green economies in the world by 2050. Korea has implemented financial policies to promote green economic development, notably credit policies, and green and budget revenue policy. Regarding the green credit policy, Korea has issued "green credit cards", so people can easily use environmentally, friendly products and save spending. When using environmentally friendly products, consumers receive bonus points and these bonus points can be converted to cash or used to reduce the price of purchase bills. Korea's green credit is implemented through three forms: direct lending, onlending, and green deposit program. Regarding revenue policy, Korea has issued policies on environmental protection fees for emissions, tax policies on energy, taxes on fossil fuels, and corporate income tax incentives aimed at green economic development. Korea regulates discharge fees to prevent or reduce damage to the atmospheric environment, caused by air pollutants. There are two types of discharge fees: basic fees and excess fees. Tax policy on energy must ensure the following principles: reduce the use of fossil fuels such as oil and coal, improve energy self-reliance; prevent global warming, conserve the environment through enhanced energy demand management; and diversify renewable energy. Korea depends heavily on imported fossil fuels (accounting for over 97% of Korea's total energy demand) and is the 5th largest crude oil import market in the world, so Korea has issued a tax on chemical fuels jelly to limit the exploitation of natural resources. To encourage scientific and technological activities to protect the environment, Korea allows businesses to deduct corporate income tax for pollution management equipment at a rate of 3% for imported equipment and 10% for imported equipment domestically produced equipment, allowing accelerated depreciation for new technology at 30% for imported equipment and 50% for domestically produced equipment. This plays a huge role in encouraging Korean businesses to invest in the fields of environmental protection and be willing to invest in research and development activities to enhance the potential for and technological development. scientific National technology - the foundation for building a green economy in Korea (Doan Thi Cam Thu, 2022

3.3. China's experience

China is making a transition to a clean growth strategy based on the development of renewable energy sources. China's energy development policy targets energy sources with high scientific and technical content, with basic content including: Developing different energy sources, promoting the development of science and technology in the industry energy, paying special attention to environmental protection issues during the development process; Prioritize saving resources, rely on domestic resources and strengthen international cooperation for common benefits. China has also established a specialized bonus fund from the state budget to reward businesses that carry out technical improvements in the direction of energy saving, and provide financial support to consumers when choosing to use these products save energy, and establish a specialized fund for treating polluting waste. China also prioritizes budget spending on programs to develop energy-efficient vehicles, new energy and subsidizes households to buy solar roofing panels or small and economical wind generators. Energy is given more importance in government procurement.

3.4. Singapore's experience

Singapore aims to become a green and naturally beautiful city by 2030. In 2021, Singapore launched a nationwide movement and promoted Singapore's national agenda for sustainable development in 5 pillars: Cities in nature; energy re-planning; living sustainably; a Green economy, and a selfreliant future. The Singapore government has continued to invest in science and technology, focusing on research and development in the green economy towards a "low carbon" future. Singapore and Australia have signed a Green Economy Agreement (GEA) between the two countries, aimed at facilitating trade and investment in environmental goods and services, providing many exciting opportunities for export activities clean energy exports from the two countries, strengthening environmental management and efforts to contribute to building global capacity to address climate change, while supporting economic growth and creating jobs for people in the regions green economy sector (Australian Government, 2021). In the green economic development strategy, the two countries strengthen cooperation in solutions to reduce greenhouse gas emissions, and make the transition to a green economy while still ensuring to improve the quality of life for people and solve problems, address the challenges of climate change (NCCS, 2022).

3.5. Japanese experience

Japan spends about 8% on science and technology annually (Tran Thi Quynh Hoa, 2021), total budget expenditure. Encouraging green initiatives is an important content and a combination of economic, environmental, and industrial policies. The government also introduced many measures to stimulate demand for environmentally friendly technology and products such as eco-point programs and green public procurement. Japan supports the cost of installing photovoltaic panels and energy-saving devices, supports increasing the efficiency of energy use and biomass of living materials from life in agriculture; Taking care of forests to increase their ability to absorb greenhouse gases, and supports green investment at the local level through the Local Green Deal Fund. Thanks to expenditures aimed at the green economy, manufacturing technology in Japan is encouraged to transition from traditional environmental pollution control regimes to non-traditional technologies related to the green economy. More than 70% of local governments and people have committed to green consumption, contributing to Japan's reducing CO2 emissions and achieving environmental standards on biochemical oxygen demand and chemical oxygen demand related to habitat maintenance.

4. Current status of financial policy to develop the green economy in Vietnam

4.1. Current status of green economic development in Vietnam

Vietnam's economy has made remarkable progress in recent times, with many changes in production and consumption, contributing to the development of a green economy. According to the assessment of the General Statistics Office, in 2021 Vietnam will be strongly impacted by the COVID-19 pandemic, especially in trade and service activities, but Vietnam's economic growth still reaches 2.58%, an insignificant decrease compared to 2020. In 2022, the economy recovers with the highest growth rate (8.02%) in the past 10 years. Vietnam's economic structure in 2022 is mainly contributed by the service and industrial sectors. Compared to previous years, Vietnam's economic structure in 2022 will shift in a positive direction, increasing the proportion of industry and services, and gradually decreasing the proportion of agriculture, forestry, and fisheries, this trend is consistent with the Government's green economic development orientation. The State offers many measures to encourage businesses to approach and apply green agricultural models, develop green industries, develop renewable energy and save energy, and reduce CO2 emissions for industrial sectors, heavy-duty.

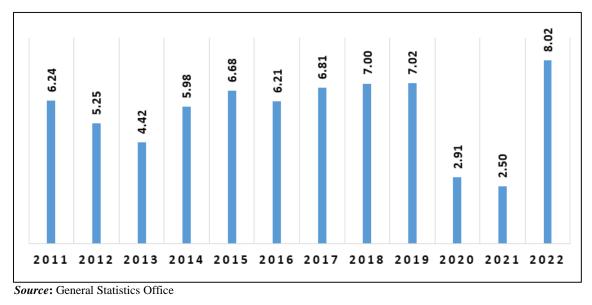
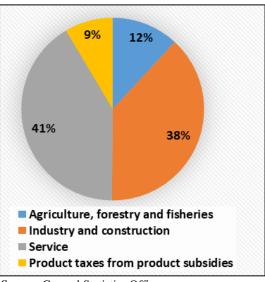


Fig 1: Vietnam's economic growth in the period 2011-2022

In addition, the World Bank has actively supported Vietnam in many fields, especially capital investment in projects on green industry, green energy, infrastructure development, and management urban environment and response to climate change. Since 1994 until now, the World Bank has committed to supporting Vietnam with more than 25.3 billion USD in national development (The World Bank, 2022).



Source: General Statistics Office

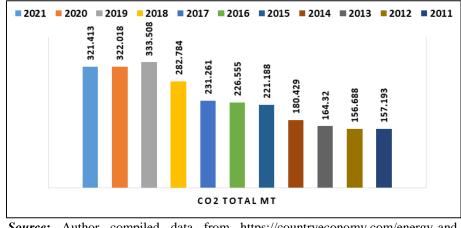
Fig 2: Structure of Vietnam's economy by GDP in 2022

Green economic development has had a positive impact on domestic labor, and Vietnam's labor structure tends to shift clearly towards non-agriculture. This trend is consistent with green the economy, contributing to supplementing and

developing high-quality human resources for applying the achievements of the Fourth Industrial Revolution to national economic development.

Besides the above achievements, Vietnam also faces many difficulties in developing a green economy. Vietnam's CO2 emissions are among the 184 most polluting countries in the world in 2021. During the period 2011 - 2021, CO2 emissions tend to increase significantly, in 2021 it will double compared

to the previous year. 2011. The ratio of CO2 emissions per \$1,000 of GDP measures a country's "environmental performance" over time. Accordingly, in 2021 Vietnam emitted 0.31 kg for every 1,000 USD of GDP, lower than in 2020. Thereby showing that the promotion of green economic development in recent times has increased demand energy consumption, which means CO2 emissions tend to increase rapidly over the years.



Source: Author compiled data from https://countryeconomy.com/energy-and-environment/co2-emissions/vietnam

Fig 3: Growth rate of CO2 emissions in Vietnam in the period 2011-2021

Financial resources for the goal of greening Vietnam's economy are still quite limited in the context of a limited state budget and the severe impact of the Covid-19 pandemic. In addition, fluctuations and instability from the world economy have had a significant impact on Vietnam's macroeconomics, making Vietnam's economic recovery process more difficult, and risking exports. Many risks exist, requiring policymakers not only to ensure sustainable development goals but also to overcome immediate difficulties. The quality of labor resources for the green economy in Vietnam does not meet the requirements of the high scientific and technological level of the green economic development strategy. Compared to the world, production lines and technology in Vietnam are mostly old and outdated, consuming a lot of fuel and energy. Therefore, applying modern production lines and advanced technology to the green economy is a big challenge for Vietnam, requiring high-quality human resources to undertake it. At the same time, advice and support from developed countries around the world is essential for Vietnam in the process of applying new science and technology (Nguyen Thi Quynh Huong & Nguyen Thi Van Chi, 2020). Regarding the legal corridor, the Government has also issued and approved national strategies on green growth and sustainable development from time to time. However, the legal system is still not truly synchronized, there are no specific legal documents regulating green energy and renewable energy; It is necessary to promulgate new laws on industrial development and environmental protection... In addition, the management and implementation of green economic development strategies in sectors, regions, and localities across the country are not linked, joined, and united with each other.

4.2. Current status of financial policies to develop green economy in Vietnam

About the results achieved

Financial policies to develop the green economy include revenue policies, expenditure policies, and other policies such as green credit, green bonds, and the carbon credit market.

Regarding collection policies, including tax policies, fees, charges, and some other collection policies. A typical tax policy to develop a green economy is the Environmental Protection Tax. Environmental protection tax is built on the principle that those who use polluting products must pay tax. Based on national environmental standards and international practices, the Environmental Protection Tax Schedule was developed. Taxpayers are organizations, households, and individuals that produce and import goods that are subject to environmental protection tax and are consumers. Vietnam stipulates that environmental protection tax must only be paid once for manufactured or imported goods (Environmental Protection Tax Law, 2010). The resource tax policy is the policy that has the direct and greatest impact on resource exploitation and use activities in Vietnam. The natural resource tax rate is specified in the natural resource tax tax rate framework and is gradually adjusted to encourage businesses to invest in innovating technological lines, and limit and use resources economically and effectively to preserve natural resources. Environmental protection, moving towards a green economy. To move towards a green economy, Vietnam is converting energy use from fossil energy to renewable energy: wind, solar, hydropower, geothermal, and biomass. To encourage investment and production towards a green economy.

Vietnam has many preferential policies for businesses, including incentives on tax rates and tax exemption periods, tax reductions, and tax-free income. Vietnam also issued policies on Environmental Protection Fees for wastewater; Environmental protection fees for solid waste; Environmental protection fees for mineral exploitation; and Fees for granting mineral exploitation rights. Regarding spending policies, budget expenditures towards a green economy are also reflected in the goals of the National Environmental Protection Strategy for 2020, with a vision to 2030. Estimated regular expenditures for conservation Environmental protection in the period 2013-2020 always ensures a ratio of about 1% of total state expenditure and has gradually increased in recent years. In addition, Vietnam is implementing other financial policies to develop the green economy such as green credit, green bonds, and carbon credit market.

About limitations

Tax and fee policies are still inconsistent and not strong enough to effectively regulate the behavior of subjects. There are no regulations on the use of revenues from environmental protection for specific spending purposes. There is a lack of uniformity in green criteria, the criteria for green projects are still unclear, the guidance on the list of green industries and fields is still general, and there are no specific criteria on organizations to base their calculations select, appraise, evaluate, and monitor when implementing green credit. Capital resources to implement financial market tools to develop a green economy are still limited.

5. Lessons for Vietnam

After researching the green economic development experiences of some typical countries including the US, Korea, China, Singapore, and Japan based on assessing the current status of green economic development in Vietnam, this article offers some suggestions on green economic development in Vietnam as follows:

First, quickly complete legal documents on green growth as well as green economic development, especially focusing on improving efficiency in implementing guidelines and policies on green economic development. The Vietnamese Government can refer to the Framework Law on Green Growth of the Korean Government. The promulgation and implementation of relevant legal documents are of great significance to the process of implementing Vietnam's National Green Growth Strategy, ensuring that green economic development always goes hand in hand with a green and healthy environment. Sustainable Development.

Second, on revenue policy: Diversify and increase the use of tax policy tools in promoting production, moving towards a green economy, ensuring uniformity in the formulation and enforcement of taxes, select tax tools suitable to the conditions of the Vietnamese economy. Tax revenue towards a green economy is used for environmental-related tasks towards a green economy, and the policy needs to be thoroughly researched and impact assessed.

Third, regarding spending policy: The Government needs to invest more resources in energy development, limit the use of fossil energy switch to green energy and renewable energy, and practice savings policies. Energy, contributing to limiting environmental pollution. To achieve green growth goals, the Government needs to focus on three main factors: Environment, carbon reduction, and renewable energy development. For other financial policies: develop green credit with the central role of the government and large financial institutions, raise environmental awareness for the entire society, and attach importance to financial market development policies. The main purpose is to create conditions for attracting capital sources towards a green economy, encouraging the development of green bond markets abroad.

Fourth, expand exchanges and cooperation with the international community so that Vietnam has the opportunity to receive support not only on science and technology issues but also contribute to promoting the mobilization of investment capital according to the law green growth direction, solving climate change problems, constantly improving, and ensuring the quality of the living environment for people. It is necessary to accelerate carbon taxation as an effective solution to reduce CO2 emissions, contributing to increasing state budget revenue. The Government can use this revenue to invest back in protection and protection. Improve environmental quality, ensuring green growth and low carbon goals.

6. References

- 1. Retrieved from Countryeconomy.com 'Viet Nam reduced CO2 emissions', 2021. https://countryeconomy.com/energy-andenvironment/co2-emissions/vietnam
- Chi NT. Kinh tế xanh và thực tiễn tại Việt Nam. Tạp chí Tài chính, 2020.
- 3. Government A. Retrieved from Singapore-Australia Green Economy Agreement, 2021. https://www.dfat.gov.au/geo/singaporeaustralia-green-economy-agreement
- 4. Kasztelan A. (4)). Green growth, green economy, and sustainable development: terminological and relational discourse. Prague Economic Papers, Prague University of Economics and Business, 2017, 487-499.
- 5. Quốc hội. Luật Thuế bảo vệ môi trường, 2010.
- 6. NCCS. Retrieved from Good Progress Made on the Singapore Green Plan 2030 as Government Accelerates Decarbonisation and Sustainability Efforts, 2022. https://www.nccs.gov.sg
- 7. Stevens P. Retrieved, 2019. from https://www.cnbc.com
- 8. Thư ĐT. Retrieved, 2022. from Tạp chí Ngân hàng: https://tapchinganhang.gov.vn/phat-trien-kinh-te-xanhkinh-nghiem-quoc-te-va-bai-hoc-doi-voi-viet-nam.htm
- 9. US Green Economy, 2021. Retrieved from https://usgreeneconomy.com/national-overview/