

Transforming Vietnam's Economy towards Green Growth⁽¹⁾

Vu Tuan Anh *

Abstract: Vietnam is now facing the pressing and urgent need to restructure the economy as macroeconomic imbalances and inefficiencies of the current growth model have become increasingly visible. The 11th National Party Congress in January 2011 analyzed and highlighted the limitations and weaknesses of the slow-paced economic transition from the width-based to the depth-based growth model, and drew valuable conclusions. The Party emphasized the urgent need to reform the growth model and conduct economic restructuring, as well as to improve the quality, efficiency and competitiveness of the overall economy. This article will explore the transition trends of the economy into the green growth model.

Key words: Green growth, Vietnam, transition, economy.

1. The economic growth model as of today

Green growth is a new development model pursued by many countries in the world. Not only does it reduce greenhouse gas emissions, curtail the negative impact of climate change but it also improves the quality of growth, reforms the production and consumption structure with sustainability and help raise the living standards of the people. Green growth was once an idea that incorporated environmental issues into the economy but nowadays, it has expanded beyond the initially restricted definition. Green growth is defined as *“the process of restructuring economic activities and infrastructure to achieve better return from investments in natural resources, human resources and finance, as well as to reduce greenhouse gas emissions, exploit and utilize less natural resources, generate less waste, and reduce social inequality”* (definition by the UN Green Growth Initiative). With these characteristics, green growth is a suitable economic model for

Vietnam. In September 2012, the Vietnamese Government approved the National Green Growth Strategy which confirmed that “Green growth is an important component of sustainable development, it ensures fast, efficient and sustainable economic development and contributes significantly to the realization of the National Strategy on Climate Change”.

In the first decade of the 21st century, Vietnam's economy grew at a rapid pace, achieving an average annual growth rate of over 7%. The industrialization process was intensified, the living standards of the people significantly improved, the local economy integrated rapidly with the world economy while the political and economic position of the country in the world arena has been significantly improved.

However, economic development in the

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(*) Ph.D., Vietnam Institute of Economics.

recent period is not sustainable. The quality of growth and the productivity, efficiency, competitiveness of the economy have remained modest, with macro-economic balances unstable. Economic growth today is width-focused, mainly depending on the exploitation of natural resources, inexpensive labour and capital supplementation, on a large manufacturing, assembly industry that relies heavily on exports and foreign investment. The characteristics of this economic growth model are illustrated in the following areas:

First of all, economic growth relies mainly on capital and labour while efficiency and productivity are neglected.

Analyzing the contribution of capital, labour and total factor productivity to total growth shows that in the past 20 years, capital has been the key driving force for growth, contributing to 46% of total growth. The labour factor has remained relatively stable, accounting for only 20% of total growth, technology and management accounting for 34% but declining, although in a few sectors such as information technology, telecommunications, energy, construction, biology, advanced technologies have helped to produce significant achievements. In the past decade, the contribution of the depth-based growth element was reduced to 20%, nearly equal to that of labour 21%, while capital spiked to 59% (Vũ Tuấn Anh & Nguyễn Quang Thái, 2011).

Secondly, production activities rely heavily on the exploitation of natural resources but consumption efficiency is low.

Industries that depend on natural resources still occupy a large share in the economic structure and this ratio is declining very

slowly. Agro-forestry-fisheries, mining sectors contributed to 34.3% GDP in 2000 and slightly dropped to 33.1% GDP in 2013 (GSO 2000, 2013).

Although Vietnam's *agricultural sector* has achieved tremendous progress and Vietnam has emerged as one of the world's biggest exporters of rice, coffee, cashew nuts, pepper and rubber, agricultural production continues to rely on small-scale production methods, with low labour productivity and low product quality. Output per each farming hectare, the value added and labour productivity remain significantly lower than those in many other countries, including the neighbouring ones.

Mining activities have been carried out with spontaneity and targeted for exports, which has resulted in overexploitation and inefficient utilization of mineral resources, environmental degradation and increased social evils. The number of enterprises involved in mining activities has grown rapidly from 427 in 2000 to nearly 2,000 businesses in 2012, coming from all economic sectors, and this figure is yet to include another few thousands of unregistered and unregulated private mining groups. Among the 4,000 mining licenses issued, few projects are intensive manufacture and even these can only apply simple technologies with limited economic value. The Government's monitoring report on the implementation of policies and regulations on the management and exploitation of minerals in parallel with environment protection which was submitted to the National Assembly on 15 August 2012 indicated that 90% of production and business units involved in mineral exploitation

and manufacturing were violating environment protection regulations.

Primary *energy generation* increased by 7.5% during 2000-2012, higher than the GDP growth rate. In 2012, clean coal output reached 46 million tonnes, crude oil 16 million tonnes, gas 9 billion m³, total capacity of power plants reached around 28,000 MW, total electricity output reached 120.795 billion kWh (of which hydro 43.9%, gas-fired 33.3%, coal-fired 17.5%, imports 2.23%, other sources 3%), per capita electricity consumption was nearly 1,400 kWh/capita/year. Sectors with highest electricity consumption included: industries, transport, commerce and services, in which the industrial sectors consumed the largest share, accounting for over 40% of total annual electricity consumption. Industries with high energy consumption such as cement and steel production experienced rapid growth, exceeding the production scale approved by the long-term master plan, resulting in a disproportionate national energy balance.

Vietnam's energy intensity has been on the rise as a result of the intensifying industrialization process, from 350kg of oil equivalent (OE) for USD1,000 GDP in 1990 to 487 kg in 2000 and nearly 955kg in 2007, much higher than that of developed economies. At present, Vietnam's energy intensity is 1.5 times that of Thailand and nearly twice the world's average. South Korea uses 0.317 tonnes of oil equivalents for each USD 1,000 GDP in 2009 and the figure is expected to decline to 0.233 tonnes by 2020. The majority of industries are those with high energy intensity.

Analyses show that in the period leading to 2015, the domestic exploration of primary energy sources will always exceed demand, and thus, Vietnam was mostly a net exporter of energy. However, after 2015, Vietnam will begin to be energy-scarce. At the baseline scenario, the country will be short of nearly 53 million TOE in 2020 and up to 143 million TOE in 2030. Without supplementing supply sources, dependency on imported energy will reach 36% in 2020 and up to 57% in 2030.

Therefore, after 2020, Vietnam will become a large energy importer and the level of dependency on imported energy will continue to increase while the world's energy prices will consistently increase as well. Without timely and effective intervention from now, this will put a huge pressure on all economic sectors as well as on energy security and safety. There is a policy paradox here: although it is widely known that in a few years, Vietnam will have to net import coal and the coal industry has continuously reported losses in coal exploitation and export, in 2012, the Government reduced export taxes from 20% to 10% as a stimulus to coal export. In 2010, total export of coal and minerals of the National Coal and Mining Group (TKV) increased to USD1.4 billion. This figure does not include many million tonnes of illegal exports.

New types of energy such as geothermal energy, wind energy, solar energy, bio-energy... are currently under testing phase with high prices, and thus, have remained unpopular.

The risk of water scarcity by 2020 as a result of an expanding population and increasing

demand for production has made water supply much more difficult. According to the Vietnam Institute of Meteorology, Hydrology and Climate change, although Vietnam's water resources are abundant, average water per capita dropped from 12,800m³/capita in 1990 to only 10,900m³/capita in 2000, and tends to decline further to 8,500m³/capita in 2020. By 2025, Vietnam might be water-scarce with the average per capita ratio below 4,000m³/capita.

According to the "National water resource protection and usage balance" analysis, total demand for water nationwide which accounted for 8.8% of total annual flows increased to 12.5% in 2000 and estimated to have reached 16.5% in 2010. Besides the increased demand for water in industrial production, there is a high risk of water pollution and exhaustion. If Vietnam does not immediately enforce appropriate measures to manage water resources and treat industrial waste water, water resource shortage and exhaustion will be unavoidable in the future.

Furthermore, the potential risks also intensify as two thirds of the river valleys in Vietnam are controlled by neighbouring countries. Fluctuations in water flows and water demand in these countries have a direct impact on Vietnam's water balance. This is an extremely sensitive issue that has become a real challenge in Vietnam's strategy for appropriate natural resources utilization.

Vietnam will also have to face similar issues due to the increased *industrial waste and pollution*. According to the World Bank's forecast, with the current GDP growth rate of 7-8% per year, environment pollution as a result of industrial waste will be 4-5 times

higher in 2020 as compared to now.

Industrial solid waste is expected to continuously increase in the coming years in spite of efforts in utilizing cleaner production solutions, as the number of industrial facilities will grow at a quicker pace from now until 2020. Particularly, the nature of industrial solid waste will also change with time – the share of hazardous waste will expand as new industries will emerge such as chemical, electronics, oil refinery, weaving and dye industries...

Vietnam's total greenhouse gas emissions in 2000 was recorded at 150.9 million tonnes CO₂ equivalent (CO₂e), or 4.84 tonnes for every USD1000 GDP. Vietnam's per capita emissions remains lower than that of developed countries but the figure has increased rapidly in recent years, from 0.3 tonnes in 1990 to 1.3 tonnes in 2007. In 2000, per capita greenhouse gas emissions (in tonnes CO₂e) of the world was 4.5, United States 20.6, Russia 10.6, United Kingdom 9.8, France 6.0, China 3.8, Vietnam and India 1.2, Bangladesh 0.3 (UNDP, 2008). In 2010, sectors with the highest greenhouse gas emissions included energy (113.1 million tonnes CO₂e, accounting for 66.8% of total emissions), agriculture (65.8 million tonnes CO₂e or 38.9%). By the year 2030, it is estimated that the energy sector will generate up to 470.8 million tonnes CO₂e or 91.3% of total emissions nationwide.

As of now, reducing greenhouse gas emissions is not a top concern for Vietnam, however, the rapid growth rate of emissions presents the urgent need for efficient energy utilization, economic restructuring and technology upgrading in the upcoming years.

Table 1: Vietnam's Total Greenhouse Gas Emissions 1994 - 2010 (in million tonnes CO₂e)

	1994		1998		2000		2010	
	Million tonnes	%	Million tonnes	%	Million tonnes	%	Million tonnes	%
Agriculture	52,5	50,5	57,4	47,4	65,1	43,1	65,8	38,9
Energy	25,6	24,7	43,2	35,9	52,8	35,5	113,1	66,8
Forest and land use change	19,4	18,7	12,1	10,0	15,1	10,0	-9,7	-5,7
Industry	3,8	3,7	5,6	4,6	10,0	6,6	-	-
Waste	2,6	2,4	2,6	2,1	7,9	5,3	-	-
Total	103,9	100,0	121,2	200,0	150,9	100,0	169,2	100,0

Source: - Greenhouse Gas Emissions Inventory 1994, 1998, 2000.

- Vietnam's 2nd National Report (2010) at the United Nations Framework Convention on Climate Change

Thirdly, Vietnam's economic growth model relies on low productivity labour.

Gifted with a resourceful and young labour force, Vietnam has focused on labour-intensive industries such as textile, leather footwear, agro-forest-fisheries processing as well as handicrafts. These sectors have created jobs for a large share of the population which in turn, has gradually helped improve the living standards of the people, creating significant revenues for the country and fostering economic growth. However, as of now, the labour force has poor qualifications and training. At the national level, in 2010, only 40% of the labour force underwent trainings (most of which went through primary trainings). The corresponding figure in the agro-forest-fisheries sector was only 15.5%, industrial sector 78%, construction 41% and services 67% (PM, 2011). The International Labour Organization (ILO) estimates that in 2013, labour productivity in Vietnam was the lowest in the Asia Pacific: nearly 15 times lower than Singapore's, 11 times lower than

Japan's, 10 times lower than South Korea's, and only one fifth of Malaysia's and two fifths of Thailand's.

It was also surprising that the local labour productivity has been in decline in recent years. During 2002-2007, labour productivity progressed at an average rate of 5.2% per year but ever since 2008, average annual productivity growth dropped to only 3.3%.

Vietnam is stepping into the era of the golden generation, however, the quality of human resources have remained poor. This is a worrying concern for an intellectual economy.

2. Moving towards the green growth model

Relying on low-skilled labour as a driving force for growth, using capital and natural resources for export and enhanced by foreign investment flows are no longer viable options for Vietnam. During the economic development process, these resources have been exploited to the full and are now at risk of deterioration. The economy's low productivity results from the absence of the

technology factor and the “sophistication” of human resources. Reforming the economic model, restructuring the economy towards depth-based development, using natural resources economically along with raising social equity and progress, protecting the environment and achieving high efficiency have become the top concern for Vietnam’s upcoming development era.

Green growth has been chosen by many countries as their national socio-economic development strategies. Not only does it involve reduction in greenhouse gas emissions but it also entails much broader aspects of the economy. It is a new development model with high quality of growth, with modern, sustainable production and consumption structure, helping to improve the living standards of the people in general. Green growth is the suitable development approach for Vietnam’s growth model and economic restructuring in the years to come. By implementing green growth, we can establish an economic structure with the capacity to effectively integrate the economy, society and environment, one that utilizes more green technologies, that fosters a green lifestyle and sustainable consumption, improving the living standards of the people in all aspects.

Green growth provides many development approaches for economic activities. Depending on the specific conditions of each country, each province, each time period, a certain approach can be chosen for implementation. It includes: using renewable energy, raising energy efficiency and using low-carbon technologies in replacement of fossil fuels; reducing deforestation and intensifying afforestation; developing sustainable agriculture and fisheries; using appropriately and more efficiently natural resources, with the top

priority is water resources; applying advanced energy efficiency technologies and raw materials, reducing waste and enhancing the development of recycling and resource-enriching technologies; establishing sustainable urban lifestyle and developing eco cities with low-carbon transportation system, etc. Furthermore, international efforts on climate change are now approaching mechanisms that can support low greenhouse gas emission and absorption projects.

Green growth is a suitable development solution for Vietnam’s new growth model and economic restructuring in the upcoming period. In 2012, the Vietnamese Government approved the National Green Growth Strategy (PM, 2012). In the next decade, the goal of the green growth strategy is to maintain the economic growth rate, improve the utilization efficiency of natural resources as well as to reduce the greenhouse gas emission intensity, protect the environment, gradually moving towards a green economy and sustainable development.

From now until 2020, Vietnam will focus on 3 key objectives in growth model reform and economic restructuring:

- (a) Enhance the use of clean energy and renewable energy, reduce carbon emission intensity;
- (b) Greening the production;
- (c) Greening lifestyles and promote sustainable consumption.

In the long term (outlook until 2030), the goal is to establish in full the physical and technical foundations, human resources and regulatory framework which can help promote green growth.

In order to meet the second objective “Greening production”, in our views, focus should be paid to the following key issues:

2.1. Greening production via economic restructuring, particularly by restricting the development of high-emission, environmentally polluting economic sectors

Adopting the “green industrialization” strategy means planning from the beginning industrial development based on environmentally friendly sectors, technologies and equipments; proactive prevention and treatment of industrial pollution, establish “green industries”.

- To restructure the economy, first of all, we need to review the socio-economic development master plans of key geographical areas, and master plans of economic sectors, especially those with high impact on the environment. This will help ensure sustainable industrial development, ensure economical use of natural resources, and effective control of pollution and waste.

New environmental standards need to be included in the list of most essential standards when selecting sectors, industries encouraged for investment, production technologies and products. There is a need to develop master plans of industrial zones, processing zones and to establish plans for pollution prevention, handling and control. Priority should be given to clean and environmentally friendly industries. The use of suitable and advanced environmentally friendly technologies and equipments should be encouraged.

- Industrial zones and clusters, as well as newly established economic zones should be designed and built following “green” standards on greenhouse gas emissions, waste treatment and green areas. From now until the end of 2015, existing industrial zones and clusters should be upgraded to meet green criteria.

- Economic sectors with large impact on the environment such as energy, mining,

construction, transportation, tourism should devise and implement action plans to help ensure sustainable development, prioritizing the application of advanced exploitation and processing technologies that are resource-saving, low-carbon using and which can help reduce emissions and pollution and improve the ecosystem.

Applying green growth in some key sectors can be made in the following ways:

- *Construction materials production:* Gradually eliminate vertical shaft kilns and old, outdated factories from the system. For newer plants that utilize advanced and highly automated technologies, energy saving equipments should be installed uniformly (heat recovery steamer, inverter engines...)

Only high capacity factories should be allowed for development (minimum 1,000 tonnes clinker per day). In terms of production techniques, the factories should satisfy advanced criteria on energy consumption, raw materials, electrical energy, dust particles concentration of emission, noise intensity, level of automation.

In brick production, priority should be given to the production construction materials which are not baked from raw materials such as cement, chippings, sand and ash.

- *Steel production:* Invest only in high productivity technologies and equipments, and those whose energy consumption level is at least equivalent to the world's current average.

- *Weaving, dying and clothing production:* new plants projects should be designed with advanced, energy saving equipments. We need to reduce under-capacity production, manage effectively internal operations, replace inefficient equipment, reutilize resources and energy, maximize energy-using production process, set up simple and appropriate

production chains, minimize intermediary equipment, select steamers, dyeing works, sewing machines, waste water treatment systems which employ modern, high productivity, energy saving technologies; select new and energy efficient heat exchangers.

- *Pulp and paper production*: new investments are needed for high-capacity pulp production projects which utilize advanced technologies, modern equipments, closed cycle technologies that meet economic and environment protection criteria. These types of projects should be planned and invested at key materials-rich areas, with investment carried out in phases.

For expansionary investment projects and intensified investments, production should be expanded, product lines diversified while product quality should also be improved with the utilization of modern technologies and equipments, increasing labour productivity, lowering of unit costs, mobilizing efficiently available management capacity and technical labour.

- *Chemical industry*: Apply advanced, highly automated technologies, install uniformly energy saving equipments, establish large scale, high capacity plants, conduct research for the efficient use of coal dust in urea production to replace high quality coal.

2.2. Greening production by reducing energy consumption in production, transportation, trade, as well as improve the efficiency and effectiveness of energy usage

There are a few solutions that can help reduce the existing level of energy consumption, including:

- Reduce the consumption of energy and electricity of existing thermal power plants
- Use electricity economically in production and consumption activities (industrial production, construction, commerce, and household consumption)

- Rotary kiln cement plants, production facilities with excessive thermal volume in steel production and coking coal production should install thermal reclamation technologies that can help direct the excessive thermal to electricity generation. This way, we can reduce the transmission of electricity from the national grid to these plants.

- Reduce energy consumption per one kilometer of transportation for all transportation means through the use of new technologies.

- Eliminate out-of-date and energy-wasting technologies from the production system and energy consumption.

- Establish necessary physical facilities that can help recover methane at coal mines, thus, take full advantage of methane for electricity generation

2.3. Intensify effective exploitation of renewable and new energy sources

in order to gradually increase the share of these types of clean energy in the national energy production and consumption.

- Adjust the structure of energy sources by reducing the share of carbon energy and increasing the share of clean energy in total energy output. Prioritize the construction of hydropower plants in a reasonable way. Prioritize the development, exploitation and utilization of natural gas. Foster the development of electricity generated from new and renewable energy.

- Enhance communication, encourage and support businesses and communities to produce new and renewable energy to supply to remote and distance areas, border regions and islands. Integrate the use of new and renewable energy into energy efficiency programs and other national target programs such as the rural electrification program, afforestation, poverty reduction, clean water programs, etc.

- Encourage enterprises to establish facilities suitable for the production, assembly and reparation of new energy equipments such as water boiler, small hydropower plants, wind turbines, biogas cellar... in appropriate locations. Acquire technology from developed countries and install high technology equipments such as solar battery, wind energy... gradually adjust them to local conditions and work on assembling and producing them domestically in the future.

- The State should enforce policies promoting the widespread use of bio-energy (ethanol and bio-diesel) in the transportation sector. So far, the energy used in motor vehicles are mainly gasoline and diesel oil. The use of bio-energy, compressed natural gas (CNG), liquefied petroleum gas (LPG) instead of traditional gasoline and oil remains limited and restricted to pilot research.

- Develop the market for renewable energy technology, establish a local industry for production of renewable energy equipments and machineries, and services.

2.4. Greening agro-forestry-fisheries production

- *Cultivation*: Focus on advanced cultivation techniques, apply water-saving irrigation procedures in the farming of rice and other crops, use at a reasonable level chemical fertilizer and pesticides. Support rice farmers in updating cultivation techniques to help reduce the use of chemical fertilizers, water and pesticides by 30%.

Convert a part of land used for farming low-yield rice crops into rice – fish, rice – shrimps joint farms.

Develop technologies for treating and reusing by-products, farm waste and integrate them into closed cycles (such as animal husbandry, mushroom cultivation, industrial

material production). Timely develop straw treatment technology to help end straw burning in open fields.

- *Animal husbandry*: Apply advanced technologies, adjust the feeding portions of cattle, poultry, fisheries. Disseminate extensively technologies that turn farm waste into biogas and organic fertilizers.

Develop biogas technologies to turn environmentally harmful farm waste into useful energy, thus, help reducing greenhouse gas emissions and enhance the use of waste beneficial to plants.

- *Forestry*: Implement extensively the program Reducing emissions from deforestation and forest degradation (REDD) and foster afforestation, improve the quality of forests as well as its CO₂ inhaling capacity, increase biomass to enhance carbon storage. Carry out afforestation on empty lands, hills and mountains, mangroves, sandbreak protection forests; windbreak protection forests and other kinds of forests as coastal / riverside protection from waves...

- *Fisheries*: Revise and change the structure of fishing boats to help save energy.

Upgrade the lighting technologies used for fishing to raise the output and save energy.

Apply advanced farming procedures in order to save food, energy and reduce organic waste output.

- *Irrigation*: Improve the efficiency of pumping stations, make full use of self-flowing irrigation systems in order to save pumping energy.

2.5. Greening the production through technology upgrading and cleaner production

Technology upgrading in Vietnam has been taking place at a sluggish pace. Scientific and technological achievements are, however, the foundation to a successful

implementation of green growth.

– Apply cleaner production in industrial activities: The Government has issued the National program on cleaner production, in which it set out the following targets: by the year 2020, 50% of industrial facilities must have cleaner production; production facilities using cleaner technologies must save from 8 - 13% of energy and raw materials consumption per unit of product; 90% of small and medium enterprises must have specialized departments for cleaner production; 90% of provincial Departments of Industry and Trade must have specialized and competent officials who can provide guidance on cleaner production to industrial facilities.

In order to meet these targets, a set of works need to be carried out altogether: communication, education to help raise awareness about cleaner production to sectors, provinces, industrial facilities and communities; perfect the regulatory and policy frameworks to promote cleaner production in industrial activities; build up capacity for management authorities, provide consultations to industrial facilities on the application of cleaner production; develop the network of organizations that help promote cleaner industrial production.

– Focus on research, development and application of green technology, such as:

- Green energy technologies (use economically fossil fuel energy, recycle energy used in industrial production, reduce emissions, solar energy, wind energy, nuclear energy, tidal energy).

- Materials and construction technologies (non-baked materials, wood - replacing materials, producing traditional materials with high technologies, smart buildings, green buildings...)

- Transportation mechanical technologies (engines using new energy, low-emission engines, smart transportation control systems, etc.)

- Agro-forestry-bio technologies (varieties, cultivation, agro-forestry-fisheries processing)

- Green chemical technologies (production of polyester from easily disposable green sources, production based on regenerative materials, treatment of toxic waste, production with limited or no by-products and waste, production consuming limited water and other chemicals, etc.)

- Waste treatment technologies (waste recycle, prevention and disposal of toxic waste)

2.6. Implement solutions with determination and in uniformity

In order to transition to a green economy, Vietnam needs to jointly implement different sets of measures, including enhancement of communications on the topic, restructuring the economy, establishment of the necessary legal framework, promotion of technology change, development of environmental services and clean energy sources, change of people's perception.. Among these measures, generating investment sources is particularly important since the green growth model is focused on increasing the efficiency of all sectors within the traditional economy (avoid socio-economic disorder) and also on relocating resources into new sectors that yield higher economic returns, are more environmentally friendly and sustainable. This requires for adequate resource mobilization, centralization and investment, as well as for the appropriate financing mechanisms.

In the transition towards a green growth model, the role of the State is vital. For the State to be able to lead the pathway into

green growth, it must have a relative degree of autonomy, support and supplement the private sector. It has to remove barriers to green investment, give priority to public investment and expenditures on activities that stimulate "greening" or "greenification" in economic components, and attract private investment in the green economy.

Investment capital should, first of all, come from public financing sources through stimulus packages channeled into green economic sectors and economic restructuring efforts. State-led financing will then serve as a lever, opening the way for further private investment (which will become the dominant financing source in later stages).

With regard to regional policies, there is a need for piloting of specialized and innovative policy mechanisms in a few areas and localities with vast potential and which present opportunities for green development. On the basis of these pilot programs, we will gain experience on policy design and generate resources and incentives to enforce the policies nationwide.

With regard to sectoral policies, we should make use of comparative advantages such as eco-agriculture, diversify and develop clean, regenerative energy sources, develop entertainment tourism, eco-tourism, high quality resorts, etc.

In terms of international cooperation, we should further welcome the financial and technical support from the international community in green economic sectors as nowadays, the focus of international organizations and ODA funds of developed countries are gradually shifting towards green areas. Vietnam should focus on relationship - building with developed economies and with pioneers in green growth such as South

Korea, Japan in Asia, Germany, Denmark, the Netherlands in Europe, etc.

Last but not least, we need to formulate policies and mechanisms that offer the highest level of preferences in investment capital, taxes, fees, land, infrastructure... to encourage domestic and external economic agents to invest and develop green economic sectors, develop clean, environmentally friendly energy, utilize waste treatment technologies and upgrade to technologies that are friendly to the environment. Particularly, the Government should enforce policies that stimulate environmentally friendly science and technology.

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