

# Circular Economic Development Ensures Sustainable Development In Vietnam: Opportunities And Challenges

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***Abstract: The United Nations forecasts that by 2030, the demand for natural resources will increase threefold compared to today. This is beyond the supply capacity of natural resources, many of which have fallen into depletion or are in danger of being depleted. Recognizing this problem, countries around the world are moving towards the development of a circular economy to solve the challenge between economic growth and environmental protection. In Vietnam, economic activity has so far been mainly based on the traditional approach, which is linear economy. This is also the basic cause leading to the shortage of natural resources and especially causing serious environmental pollution. In order to realize rapid and sustainable development, to harmoniously deal with the relationship between economic growth and environmental protection, to "do not trade off" economic growth with environmental pollution and degradation, to switch to an eco-friendly economy. Circular economy is the right direction. However, this transformation requires seizing the opportunities and accepting the challenges that need to be overcome. The article analyzes opportunities and challenges of circular economy development and proposes solutions to promote circular economy development for Vietnam in the coming time.***

***Keywords: Circular economy, resource depletion, environmental pollution, climate change, sustainable development, Vietnam***

## 1. INTRODUCTION

Vietnam, after a long period of development based on natural resources and cheap labor, has achieved much in socio-economic development, but is facing many serious challenges in terms of resource depletion resources, environmental pollution and climate change. Therefore, Vietnam needs to show responsibility in solving global challenges caused by environmental pollution, climate change, and improving the competitiveness of the economy. Building a society that consciously takes advantage of used materials instead of consuming treatment costs, minimizes exploitation of natural resources, makes the most of the value of resources, and minimizes them waste, gas emissions into the environment, protect people's health. It is necessary to orient to build an advanced economy to reduce the risks of overproduction and resource scarcity, create new investment and job opportunities, reduce production costs, and increase supply chains. Stemming from the actual situation of Vietnam and experiences from advanced countries, the circular economy is an effective solution for sustainable socio-economic development of the country, in line with the conditions of the

country's natural resources are limited and are gradually being exhausted, the environment is being degraded. Vietnam needs to focus on implementing solutions to develop the circular economy, harmoniously solving the relationship between economic growth and environmental protection.

*The research questions in this study will be:*

Question 1: What are the opportunities and challenges for circular economy development in Vietnam today?

Question 2: What are the solutions to develop the circular economy in Vietnam in the coming time?

## 2. LITERATURE REVIEW

The circular economy originates from the ideas and contributions of American scientists such as John Lyle, William McDonough, German chemist Michael Braungart and Swiss economist and architect Walter Stahel over the past decade 70 of the last century (Winans, Kendall & Deng, 2017). The concept of a circular economy was first used formally by Pearce and Turner (1990) in the sense that this economic model is based on the basic principle of "everything is an input to something else" for the traditional linear economy.

In the late 90s of the twentieth century, many countries in the world and international organizations focused on developing the circular economy on a deeper and broader scale. At the 2012 Global Economic Conference, the Ellen MacArthur organization presented a widely accepted definition of the circular economy. Accordingly, "a circular economy is a system that is regenerative and restorative through proactive planning and design" (Macarthur, 2021). Kirchherr et al. (2017) reviewed 114 definitions of circular economy and the group's paper in less than 3 years has reached 1,500 citations. "Specifically, the circular economy is an economic system developed on the basis of business models. In which, the concept of end-of-life is replaced by the reduction, reuse, recycle and recovery of materials in the production, distribution and consumption of products. Therefore, the circular economy will apply at small (manufacturer, company, consumer), medium (eco-industrial zone), large (city, region, national and transnational) levels. The circular economy aims at sustainable development in which environmental quality, economic well-being and social justice are created. It all benefits present and future generations" (Kirchherr, Reike & Hekkert, 2017).

Potting et al., The circular economy is a system of factors (9Rs): Rejection (R0 - Reducing redundant functionality in a product or attaching a function to very different products); Rethink (R1- Change your mind about using the product); Reduce (R2 - Reduce costs when producing and consuming products); Reuse (R3 - Transfer usable items to others for use when the original user does not need them, or restore the functionality of the product after a period of use); Repair (R4 - Repair and maintain the product so that it can be used as original); Refurbished (R5 - Maintain and upgrade the product for use); Remanufacturing (R6 - Using usable components in the damaged product to produce a new product with the same function); Reuse (R7 - Using a defective product or its parts and components to manufacture products for other uses); Recycling (R8 - Recycling materials to produce new products); Recovery (R9 - Destruction of materials with energy recovery) (Potting, HekkertWorrell & Hanemaaijer, 2017)

In their research, Nam & Hanh said that the Theosophical economy operates on the basis of three basic principles, which are "Conservation and development of natural capital through control, in order to use manage resources and regenerate natural systems; especially promoting the use of renewable energy; Optimize resource return by circulating products and

materials as much as possible in engineering and biological cycles and improve overall system performance by minimizing standard externalities through waste design, pollution design from the very beginning of the production process" (Nam & Hanh, 2019)

Huyen, V.B and Toan, N.N identified 3 core contents of the circular economy as "Reducing emissions to the environment through economical and efficient use of raw materials and energy and the use of raw materials and energy renewable; Reuse, repair, and maintain to prolong the product's life; Recycling, making use of scrap, waste becomes production input" (Huyen & Toan, 2021)

In the current context, the transition from a straight to a circular economy is essential for all countries in the world, notwithstanding Vietnam. The cooperation of the whole society, breakthrough in thinking, innovation, in order to contribute to providing solutions for businesses and localities, technology transfer and education, raising awareness to promote development. Circular economic development is very necessary and urgent. Recently, in the policies of the Party and State such as: Resolution No. 55-NQ/TW dated February 11, 2020 of the Politburo on orientations of Vietnam's national energy development strategy to 2030, vision to 2045; Decision 889/QD-TTg dated June 24, 2020 of the Prime Minister approving the national action program on sustainable production and consumption for the period 2021-2030; *Document of the 1eth National Delegation*, Summary report on 10-year socio-economic development strategy 2011-2020, formulation of 10-year socio-economic development strategy 2021-2030, concept "circular economy" has been updated and is considered as one of the important solutions and approaches to the goals of socio-economic development and environmental problems of our country in recent years.

This is the original documentary value for the author to inherit, the opportunity to conduct and the formula in the development of the circular economy in Vietnam today.

### 3. MATERIALS AND METHODS

According to the United Nations Industrial Development Organization (UNIDO), circular economy is a closed production cycle, wastes are returned, becoming raw materials for production, thereby reducing all negative impact on the environment, ecosystems and human health.

According to the Ellen MacArthur Foundation (2012), the definition of a circular economy widely accepted by many countries and international organizations today is "a system that is restorative and renewable through planning and design" proactive design. It replaces the concept of "end of life" of materials with the concept of recovery, shifting towards the use of renewable energy, no use of harmful chemicals that harm reuse and towards reducing waste reduction through the design of materials, products, engineering systems and business models within that system.

According to Wikipedia (2018), a circular economy is an economic model in which design, manufacturing, and service activities aim to prolong the life of matter and eliminate its negative impact on the environment. Cyclic systems apply reuse processes through sharing, repair, refurbishment, remanufacturing and recycling to create closed loops for resource use.

The purpose of the circular economy is to prolong the life of products and increase the productivity of resources. All "waste" of a consumer production process should be treated as raw material from other consumer production processes, regardless of whether it is a by-product or a resource recovered from a process other industrial or renewable resources for the natural environment. This approach is in contrast to the widely popular linear economic model.

Thus, a circular economy is an economic model in which design, manufacturing, and service activities aim to prolong the life of materials and eliminate negative impacts on the environment. If the linear economic model is only concerned with resource extraction, production and disposal after consumption, leading to the creation of a huge amount of waste, the circular economy focuses on management and recycling issues create resources in a closed loop, to avoid creating waste. Circular business models can be as profitable as linear models, while still allowing consumers to use the same products and services.

According to calculations from environmental experts, if countries successfully apply the circular economy, they can promote the use of high-tech products and services to optimize the use of resources. This application will help reduce business operating costs, increase competitiveness and lead to a global development opportunity worth up to \$4.5 trillion by 2030.

In addition to reducing the amount of waste discharged into the environment and rationally using natural resources, the circular economy also actively contributes to the fight against climate change today. According to Circle Economy executive director Harald Friedl, an efficient use of materials from all kinds of waste can support the realization of the key goal of the Paris Agreement on climate change: keep the global temperature increase no more than 20C compared to pre-industrial times. The circular economy also helps reduce carbon emissions, helping to improve the quality of life around the world in line with the Paris Agreement and the United Nations' Sustainable Development Goals.

According to the report on the efforts of countries to combat climate change published at the United Nations Conference on Climate Change (COP24) taking place in Katowice (Poland) 2018, although the world has reached some results have been achieved through actions to prevent global warming, but the temperature rise is still very high. Therefore, countries around the world need to make stronger and more decisive commitments, as well as implement measures to mitigate and increase climate change adaptation and financial support for poor countries. At the same time, towards a clean, green economy - a circular economy. This will be an effective solution to ensure sustainable development for countries around the globe.

Information from the 5th Sustainable Development Conference held in Thailand (2018), the circular economy is considered a global trend, a guideline for sustainable development strategies for countries, especially developing countries in ASEAN. ASEAN is a region with many challenges because its economies are in the developing stage, the region is also a production center to meet the increasing demand of the world. Therefore, the successful application of the circular economy can promote the use of high-tech products and services, thereby optimizing the use of resources.

With about 1,000 delegates from nearly 200 countries and 100 leading corporations in the world, the conference connected the parties to bring the whole ASEAN region together on the journey to apply the circular economy model, towards the goal sustainable development goals.

Along with that, within the framework of the 6th General Assembly of the Global Environment Fund (GEF6 - June 2018), the United Nations Industrial Development Organization (UNIDO) together with other governments and organizations involved discussed how circular economy approaches can generate global environmental benefits, based on green industrial development. At the seminar, experts made comments and assessments about the great benefits of the circular economy. Accordingly, one of the biggest benefits when promoting a circular economy is that resources are used efficiently, contributing to environmental protection and sustainable development.

UNIDO is currently promoting circular economy practices and providing closed-cycle services for the production, use and disposal of used products - from the extraction of raw materials, to the finished production, distribution, use, waste management all the way to final disposal to ensure that resources are continuously used as a result of creative activities.

The circular economy approach is a driving force, contributing to the sustainable development goals. The Circular Economy is also a high priority on the global agenda attracting special attention from international organizations such as the European Union (EU), with its Action Plan for the Circular Economy or the G20 Special Action Group on the Circular Economy.

The circular economy thus describes an economic system based on business models that replace the concept of "end of life" with the reduction, reuse, recycling and recovery of materials in production/distribution and consumption processes at the micro level (production, enterprises, consumers), the intermediate level (ecological industrial zones), the macro level (cities, regions, countries and beyond), with the objective of achieving sustainable development, ensuring good environmental quality, economic prosperity and social justice, meeting present and future interests. Linear economy only cares about the exploitation of resources, production, consumption and does not care much about the discharge into the environment, so it has maximized the exploitation of natural resources leading to the creation of a large amount of waste giant waste, while the circular economy focuses on managing and recreating resources in a closed loop, avoiding the generation of waste. Resource utilization takes many forms, from redesigning, reducing, repairing, reusing, recycling, and instead of physical ownership, towards sharing or renting.

The transition to a circular economy is a great opportunity for rapid and sustainable development, not only achieving economic, social and environmental goals but also helping to respond to climate change. The transition to a circular economy helps meet the goals of the 2030 Agenda for Sustainable Development. Approaching the transition from a linear economy to a circular economy brings benefits in the context of resource scarcity and climate change. Besides, this approach is not only adjustments to mitigate the negative effects of the traditional economy - linear economy, but also a systemic change that creates long-term resilience, business opportunities as well as environmental and social benefits. At the same time, this is also a premise for the implementation of the Sustainable Development Goals (SDGs 2030) through ensuring sustainable production and consumption, such as reducing the rate of "declining" resources, preserving meet the needs of future generations; raising people's awareness about reuse and recycling of waste, limiting unnecessary consumption of single-use items; extend manufacturer's responsibility to support 100% waste-to-material recycling. This is the path towards a low carbon economy, especially in heavy industries. Calculations of the European Union (EU) show that the circular economy through measuring and controlling activities from the demand side can help reduce emissions from industries by more than half.

*Methods.* To do the research, the author uses qualitative research methods and explanatory methods. Qualitative research method: Based on the theory and model from previous studies to collect information, then analyze the current situation (opportunities and challenges) of developing the circular economy model in Vietnam. Text analysis is used to analyze and interpret the content of the novel.

At the same time, the article also uses a synthesis of specific research methods such as history, logic, comparison, analysis, synthesis, induction and deduction, data synthesis to serve the research and present articles.

*Scope of Article results.* The article studies the current situation of circular economy development in Vietnam. The research results can be used to make policy recommendations for the Government and regional leaders in Vietnam in formulating plans and strategies for circular economy development to meet the requirements of sustainable development sustainable in Vietnam in the process of international integration.

The novelty of the article: From the study of theoretical models, analysis and assessment of opportunities and challenges for the development of the circular economy and proposals for solutions to develop the circular economy in Vietnam in the coming time.

#### **4. RESULTS AND DISCUSSIONS**

##### **Experience of circular economy development in some countries**

- Sweden is one of the leading countries in the world in implementing the development of a circular economy, through the treatment and recycling of waste, has applied a uniform recycling policy across the country. Since 2011 most of the country's waste has been disposed of, with less than 1% of Swedish household waste going to landfill. As a result, Sweden has become one of the few countries to maintain a balance in the process of industrializing the country, with economic growth rates continuing to increase and emissions decreasing. According to calculations, Sweden's per capita greenhouse gas emissions are among the lowest in the EU and the Organization for Economic Co-operation and Development (OECD) countries. In 2013, Sweden's greenhouse gas (GHG) emissions fell to 55.8 million tons of CO<sub>2</sub> from 71.8 million tons in 1990 - a 22% reduction. Meanwhile, Sweden's GDP has grown by 58% during this time.

- In the Netherlands, while the demand for raw materials in the country is growing and the supply depends on other countries, the Dutch Government has defined the transformation of the economic model to a circular economy as essential requirements of the country today. Accordingly, the Netherlands is developing a program to support the circular economy with the aim of ensuring healthy, safe living and working conditions, and less harmful to the environment. This program has the participation of many relevant Ministries, including all programs for more efficient handling of raw materials: From waste to resources (VEN), green development and economy programs economy on a biological basis. In addition, the Netherlands is implementing many measures to encourage and invest in businesses towards a circular economy. During the implementation process, the Government has selected 5 economic sectors and the first value chain will be converted to a circular economy. These 5 priorities are very important to the Dutch economy and have a great impact on the environment, including biogas and food, plastics, manufacturing industry, construction industry and consumer goods.

The analysis shows that the transition to a circular economy not only brings economic opportunities, but also promotes scientific development, cuts CO<sub>2</sub> emissions, ensures health and safety. Particularly for the Netherlands, this economic model can create more than 50,000 jobs, reduce waste by 10% into the environment, save 20% of water used in industry, and reduce imports of basic sources by 25% and generate 7 billion euros for the national economy. In addition, the Government of this country is also committed to implementing legal reform, intellectual market incentives, financial support, and knowledge enhancement to promote international cooperation towards sustainable development.

-In China, in 2008, China passed a bill related to the circular economy. In 2017, the Circular Economy Policy Program was promulgated by China to expand the responsibility of manufacturing enterprises in saving energy and using renewable raw materials. In 2018, China and the European Union signed a memorandum of understanding on circular economy

cooperation. In 2019, the intercontinental cooperation of 200 enterprises from countries around the world and China committed to a circular economy on plastics... The circular economy in China was built according to a specific roadmap, from defining the concept of development to the goal of developing a circular economy, through a legal system that is mandatory for businesses. The Government's actions have in fact created a strong impetus to develop the circular economy. Along with that, China has built three stages to develop the circular economy, including: small circular (implemented at the scale of factories and industrial zones); medium cycle (scales up more) and large cycle (performs across the entire economy). In addition, China is also building national eco-industrial parks for waste treatment and recycling.

- Singapore has developed technology to turn waste into energy since 1979. Currently, this country has built 4 factories, treating 90% of the country's waste with a capacity of up to 1,000 tons of garbage per day. This technology is briefly explained as "the heat from combustion produces steam, which propels the turbine generator and generates electricity. The smoke from this process will be carefully filtered to remove harmful substances before being discharged" (Knowledge young, 2019). With the remaining 10% of "stubborn" waste, Singapore has creatively turned it into a garbage island, 20 years later (since 1995) Semakau - the world's first man-made "garbage island" - was born. These actions of the Government of Singapore are aimed at a society where there is no waste, everything is recycled, in accordance with one of the leading principles of the circular economy.

In another direction, in Korea, the government enacted a law on food waste disposal in 2013, specifying waste collection standards. Waste is placed in biodegradable bags or directly in metal bins equipped with gauges and radio frequency identification chip readers. This law also stipulates that people will have to pay extra money, if the amount of this waste exceeds the allowed volume and 60% of that money is used by the Government to pay the cost of collecting and treating waste generated. Currently, in Korea, up to 95% of food waste is recycled into compost, animal feed or fertilizer, with the remaining liquid after being squeezed out of waste that is fermented into gas or bio-oil to use (Moon, 2019). This is a closed cycle from collection, treatment to recycling of products in the form of "symbiosis".

It can be seen that the circular economy has not stopped at a new concept but has been transformed into the plans and activities of each country in the world. However, to be able to successfully implement a circular economy depends not only on the efforts of the Government, but also requires the active participation of the business community and each citizen himself. From the Government side, it is necessary to encourage organizations to apply circular economy in business activities to build a sustainable future for businesses and organizations.

Besides, people also need to realize the importance of responsible consumption and take action through the reuse or recycling of waste. The successful application of the circular economy model is expected to bring sustainable development to each country, and at the same time improve the quality of life of the community, thereby leading to sustainable development on a global scale.

### **Opportunities and challenges of circular economy development in Vietnam**

Vietnam attended the World Forum on Circular Economy in 2019 in Finland and participated in the Program to share experiences in policy development, visit production models, and actual business of products from this economy in Germany. These are good opportunities for Vietnam to receive a lot of information, learn from successful experiences and ideas to develop policies and apply their own circular economy model. There have been a number of

circular economic models implemented, bringing certain effects, such as: the model of ecological industrial parks in Ninh Binh, Da Nang, Can Tho...; model of processing aquatic by-products (shrimp shells, shrimp heads) to create Chitosan and SSE; the initiative not to discharge waste into nature initiated by the Vietnam Chamber of Commerce and Industry; initiative to recycle Tiger beer cap into iron to build a bridge in Tien Giang... Most recently, on July 2, 2020, Vietnam's first Institute for Circular Economy Development (ICED) was announced to be established in order to carrying out the mission of scientific research, innovation, focusing on scientific - technological solutions and policies in the development of circular economy in Vietnam on the basis of the business - Government - university ecosystem. In the medium and long term, ICED sets a vision to become the leading center of circular economy in Vietnam and the region on the basis of becoming a Center for Research and Development of a Circular Economy model in accordance with the conditions of the circular economy. Vietnam case, policy recommendations in the application and development of stakeholder models. In addition, ICED will provide knowledge and solutions on science - technology, innovation to serve the development of the circular economy in the country and in the region; is a center for technology transfer, consulting solutions and policies on sustainable development for the Government, businesses and local communities. At the same time, this is also a center for connecting businesses - the State - universities, linking interests and needs between related parties towards the goal of sustainable development.

It can be said that Vietnam is facing many opportunities to develop a circular economy, specifically:

- The circular economy is now becoming a common development trend globally and is considered as one of the priorities to be prioritized in the national development policies of many countries around the world towards sustainable development, such as: EU, Sweden, France, India, etc. In fact, many countries have succeeded in developing the model of the local economy and reaped many benefits. Vietnam has the opportunity to learn from the experiences of previous countries and draw lessons to apply to the domestic context.

- Vietnam is a country with a strong speed of deep integration into the economy, especially participating in bilateral and multilateral free trade agreements, free trade new generation. Most of these Agreements contain provisions and agreements on sustainable development, environmental protection, response to climate change and compliance with waste and emission standards. This will be a premise to promote Vietnam to accelerate its transformation to a circular economy model.

- The State has issued many guidelines and policies on transforming the growth model towards sustainability; strengthen management of natural resources, protect the environment in response to climate change; increase recycling and reuse. Vietnam is in the process of perfecting the socialist-oriented market economy institution with the aim of developing a fast and sustainable economy. Meanwhile, the circular economy model can meet the above goal in our country's policy guidelines. Along with that, policies to encourage and create mechanisms for the private economy to develop in the context of a competitive market will have many opportunities for private sector investment in implementing circular economy development in the future next time.

- Vietnam has been heading to the fourth industrial revolution, research and promotion of technological innovation, moving from the real world to the digital world will be a great opportunity to realize economic development cycle, resulting in a higher growth efficiency than the previous growth method.

- Developing a circular economy can solve resource scarcity, protect the environment, respond to climate change and bring about high economic efficiency, helping to achieve



many goals and targets requirements of the sustainable development goals. Therefore, the knowledge economy will receive high support and consensus from the whole society. This is a great source of motivation to promote the development of this economic model.

As a country with a backward economy, the transition to a circular economy with many high requirements of the development and integration trend has posed many challenges for Vietnam such as:

*First*, the policy framework on developing the circular economy model has not been clearly and specifically formulated. Vietnam currently does not have a legal corridor to develop circular economy. Currently, Vietnam still lacks mechanisms and policies to promote circular economy such as: regulations on responsibility for recalling and taking advantage of resources from used products of enterprises; economic tools and policies such as resource tax, environmental protection fee, etc.

*Second*, awareness of the circular economy and the need for a transition to the development of a circular economy model is still limited. The correct awareness of the circular economy needs to be made from the design stage to the implementation stage for each industry, each field, and needs to be agreed and unified from the leaders, all levels of management to each enterprise and business.

*Third*, resources for the transition to circular economy development are still weak. The circular economy must be associated with scientific innovation and access to advanced technology. In addition, to develop a circular economy requires a team of good experts who can solve problems from the beginning to the end of the whole process.

*Fourth*, Vietnam still lacks enterprises capable of technology in recycling and reusing used products; It is difficult to immediately change the production and consumption habits of the whole society today for many easy-to-use products such as plastic bags and disposable plastic products to using only recyclable materials and products, fully reusable; Vietnamese small and medium-sized enterprises find it difficult to invest in technological innovation.

### **Some proposals to develop circular economy in Vietnam**

To promote the development of a circular economy in Vietnam, it is necessary to synchronously implement solutions from raising awareness to perfecting institutions and implementing organizations, specifically:

*Firstly*, complete the legal corridor to serve the development of the circular economy. Accordingly, it is necessary to amend and supplement the Law on Environmental Protection, specifying the specific responsibilities of manufacturers and distributors in the recovery, classification and recycling or payment of treatment costs for waste products removed based on the number of products sold in the market; manage projects according to the life cycle, establish a roadmap for the development and application of environmental standards and regulations equivalent to the group of advanced countries in the region. Along with that, speeding up the completion and issuance of preferential policies and mechanisms, supporting the promotion of the environmental industry, including the recycling industry. Promulgating technical regulations and standards, promoting the development of the market for exchanging by-products and waste products to connect the chain between disposal - recycling - reuse so that waste and waste become secondary resources in the closed-loop system of the new production cycle.

There should be a clear legal corridor for the formation and development of circular economic models. Enterprises are the central driving force, the State plays a constructive role, organizations and individuals participate in implementation. The State's tectonic role is shown in creating an environment for the circular economy to develop. Vietnam may

consider including both approaches to implementing the international circular economy in its roadmap.

*Secondly*, building an in-depth economic growth model, effectively using input resources, applying science and technology to industries, especially waste treatment to regenerate new materials. Regulating a roadmap to replace fuels, products using hazardous materials, single-use products with environmentally friendly fuels and materials, reusable products, prolonging their use life. usefulness of the product.

*Thirdly*, adjust energy planning, gradually reduce dependence on forms of energy from fossil fuels, hydropower; controlling and selectively attracting investment projects on the basis of considering factors of production scale, production technology, environmental engineering and project implementation location. Building a technology transformation roadmap based on energy saving and efficiency criteria, and waste reduction.

*Fourthly*, promote research, promote the application of technological advances, directly or indirectly, to support the transformation of the traditional economy to a circular economy. It is from this requirement that in each stage, the State needs to choose to support the research and application of scientific and technological advances in a synchronous manner for the entire chain of material transformation from exploitation to use resource utilization until the completion of consumption/use of products/services created from resources and recycling or reuse, to return the original resources to the service cycle social demand. Because the usage needs, investment needs and efficiency of each material transformation cycle are different and the resources serving the realization of this transformation process are also different, the choice has important implications important for the expansion and development of the circular economy.

*Fifthly*, to expand the circular economy, manufacturers need to clearly define what is the top priority of enterprises. Instead of making products as quickly and as cheaply as possible, product durability and sustainable manufacturing are key. Products need to be designed to be easily recyclable if they are not to end up in landfills. In addition, businesses need to make efforts to develop environmentally friendly supply chains. In particular, the most difficult part of the mission to expand the circular economy will be convincing consumers to change their shopping habits.

*Sixthly*, strengthen the exchange and learn from international experiences, especially countries that have successfully implemented the model of the local economy, thereby transferring and applying it to the specific circumstances of Vietnam. Develop a Marketing Communication Strategy to raise awareness among manufacturers and the public about their responsibility for products throughout their life cycle.

## 5. CONCLUSION

Developing circular economy is a common trend of the world community and Vietnam is not an exception to that trend. It is the best way to break the long-standing link between economic growth and the negative effects of resource depletion, pollution and environmental degradation, in other words, there is no longer a trade-off between development and environmental degradation economic and environmental protection, simultaneously realizing many goals of sustainable development. In the context of international integration, economic urbanization, population growth and changes in consumption patterns have been and will lead to consequences of increasing depletion, degradation and pollution. Choosing an approach to transition to a circular economy should be considered as an indispensable thing to do in order to achieve the goal of "fast and sustainable economic development", shortening the

development gap compared to other countries in the region and around the world. To realize this orientation requires the efforts of all sectors of society, especially enterprises as the central driving force, the state plays the role of creating, leading, and the community participates in implementation to achieve this goal changes in both awareness and behavior of the whole society.

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