

# Situation And Solutions To Develop The Circular Economy In The Southeast

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***Abstract: To get rapid and sustainable development, harmoniously solving the relationship between economic growth and environmental protection, “no trade – offs” economic growth with environmental pollution and degradation, transition to a circular economy is the appropriate direction. However, this transition needs to catch up opportunities and accept the challenges that need to be overcome. Global economic growth has gained great achievements, along with that is the shortage of natural resources, the increase of environmental pollution. However, the circular economy also requires strict conditions in terms of institutions and resources. Therefore, the study of the experiences of the preceding countries, points out the difficulties and advantages, and then shines on Vietnam, identifying conditions for the transition from a linear economy to a circular economy is the main content that the Southeast region's economy is aiming for.***

***Key words: situation, solutions, economy, circular, Southeast.***

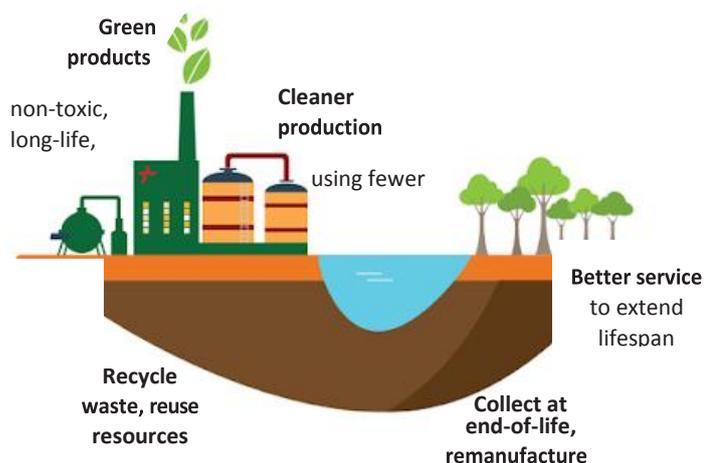
## 1. INTRODUCTION

The circular economy describes an economic system based on business models that replaces the concept of "end of life cycle" with minimization, reuse, recycle, and recovery of raw materials in production / distribution and consumption processes at the micro levels (production, enterprises, consumers), intermediate level (eco-industrial zones), macro level (city, region, country and beyond), with the goal of achieving sustainable development, ensuring good environmental quality, economic prosperity and social equity, to make sure current and future benefits. Linear economy is only interested in resource exploitation, production and consumption, it does not pay much attention to the disposal to the environment, so it makes the most of natural resources, leading to the creation of huge amounts of waste while the circular economy focuses on managing and regenerating resources in a closed loop, avoiding the creation of waste. Resource utilization takes many forms, from redesign, minimization, repair, reuse, recycling, and instead of physical possession, it towards sharing or leasing.

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 cope with climate change. The transition to a circular economy helps to meet the goals of a transition from a linear to a circular economy with benefits in the context of resource scarcity and climate change. In addition, this approach is not only adjustments to minimize the negative effects of the traditional economy - linear economy, but also a systemic change that creates a resilience in the long term, business opportunities, as well as environmental and

social benefits. Moreover, this is also a prerequisite for achieving sustainable development goals through ensuring sustainable production and consumption, such as reducing the rate of "depletion" of resources, kept to meet the needs of future generations; awareness of people about reuse, reduce garbage, limiting consumption of unnecessary single-use item; extend producer responsibilities to support 100% recycling of waste into raw materials. This is the pathway towards a low carbon economy, especially in heavy industries. As of the European Union (EU) show that the circular economy through measuring and controlling activities from the demand side can help reduce by more than half of emissions from industries.

According to the set target, the Southeast region strives to achieve an average economic growth rate (GDP) in the 2011-2020 period of 9.5% -10% / year. By 2015, GDP per capita will be equivalent to USD 4,600 and by 2020 it will reach USD 6,400. Proportion of industry, construction and services accounts for 97-98% of the total GDP of the region by 2020, of which services account for over 44%, higher than the national average. The speed of technology innovation reaches an average rate of 20-25% / year; increase the rate of trained workers to over 90% by 2020. To establish high-quality social and production service centers, reaching international and Southeast Asian standards [1].



## 2. SITUATION TO DEVELOP THE CIRCULAR ECONOMY IN THE SOUTHEAST

### a. Advantages

The economic development level of the Southeast is generally higher than that of the whole country in most industries, high-tech industries, tourism services, telecommunications, finance and banking; research, application and deployment, training of human resources. The Southeast is the largest industrial center of the country. A dense network of industrial parks, concentrated in the quadrangle of Ho Chi Minh City, Binh Duong, Dong Nai and Ba Ria - Vung Tau. Up to now, the Southeast accounts for about 40% of GDP, contributing nearly 60% of the national budget revenue, GDP per capita is nearly 2.5 times higher than the national average; has the highest rate of urbanization in the country. The economic growth rate of the region is always about 1.4 - 1.6 times higher than the national average [2].

In addition, the Southeastern economic region with the nucleus is Ho Chi Minh City - where training and scientific research institutions and medical centers are concentrated; a place with

abundant and skilled human resources, a hub of regional and international trade and service, so it is an attractive investment environment in the region, a satellite urban network has been formed, in a well-ventilated open space, linked with each other through the axis and ring which are being built. The Southeast is also the largest international integration center in the country with Cai Mep - Thi Vai international transshipment seaport (shaped), Tan Son Nhat international airport and Long Thanh international airport. The Southeast is a dynamic economic region leading in attracting foreign investment (FDI). Up to now, the region accounts for about 60% of the total number of projects and nearly 50% of the country's FDI capital, and the region's export turnover accounts for nearly 60% of the country's total export turnover.

The region with a large and highly qualified workforce has been selected to try many new economic development mechanisms and policies. With the largest international port and airport system in the country, the region becomes a tourist center, developing industrial services, information technology, telecommunications and logistics... largest in Vietnam. The region with Ho Chi Minh City is the largest commercial, financial, banking and securities center in the country. To build Ho Chi Minh City as the driving force center of the region; a focal point for inter-regional and international cooperation; economic, trade, service, education - training and science - technology center of the region and the country. To form a multi-center structure in order to create a driving force to develop the surrounding peripheral areas, while reducing pressure on the central area of Ho Chi Minh City. The urban centers of Vung Tau, Bien Hoa and Thu Dau Mot will become grade I cities and play a role as poles of development in the regional urban system. At the same time, to develop satellite towns of Ho Chi Minh City such as Nhon Trach, Long Thanh, Tam Phuoc, Hiep Phuoc, Cu Chi, Trang Bom, An Lac, Nha Be, Can Gio, Di An - Thuan An ...

#### *b. Disadvantages*

- Central investment resources for the Southeast only account for about 18.5% of the country's total investment capital, completely incompatible with the great contributions of the region. Particularly in Ho Chi Minh City, from January 1, 2018, the retained budget revenue ratio has decreased sharply from 23% to only 18%, while there are still many large projects that need investment and development. spread, promote the development of the Southeast [3]. As a main region for agricultural commodity production and export of industrial and electronic goods, the Southeast region has not yet formed large-scale logistics centers and dry ports to act as multilateral transshipment of goods consciousness of the region; there is a lack of a national railway connecting industrial centers in Binh Duong and Dong Nai to the cluster of deep-water ports of Cai Mep - Thi Vai. As for the inter-regional coordination mechanism, there are currently no mechanisms and regulations on the role of the head of the whole region, so over the past time, localities have operated according to the functions and tasks within the region their local area. The coordination between localities in the region, if any, is only a separate cooperation development between localities.

- Proper awareness of the nature of the circular economic model is carried out from design to implementation, in sectors and fields, for each enterprise, people and at all levels of management and leadership to create a general consensus is a major challenge. Circulating economy associated with technological innovation and model design in the context that we are a developing country, most of the technology is out of date, with small scale of production, this is a great challenge to overcome.

- At present, there is no legal corridor for the development of circular economic models, this challenge needs to be overcome, otherwise the implementation of circular economic models is just spontaneous and subject to adjustment of market dynamics.

- The Southeast is the region with the highest proportion of immigrants in the country, and attracts the most domestic private investment and FDI in the country, so the continuous increase of these two inputs has helped the Southeast to maintain the GRDP growth rate higher than the national average. However, growth is mainly due to these two tangible inputs while productivity growth is not high, so it is impossible to create a driving force to continue to promote growth and the Southeast economic region will have to face the fact that the space to increase capital and labor will gradually be exhausted. at the same time leading to increased traffic congestion and pressure on traffic infrastructure, which is a huge growth hindrance for the region. Another noteworthy point is that the share of GDP in innovation and innovation in the Southeast is also very low. For example, in Ho Chi Minh City, although the population growth rate is very high, until now, the growth has mainly been based on industry 2.0, thus attracting many workers, while the urban area is not ready for infrastructure, immediately causing overloading of infrastructure, traffic jams, flooding, pollution, increasing crime ... and among the industry groups that contribute a high proportion to Ho Chi Minh City's GDP according to statistics including textiles, footwear, food, beverages, rubber, chemicals, prefabricated metals and electronics. [4]

- There is no set of criteria to identify, evaluate, summarize and classify the development level of existing economic models, what kind of model is a circular economic model, a model close to economic since then, there will be appropriate implementation plan and replication [5]. The circulating economic model is the culmination of an approach towards zero emissions, which requires a true shared coordination associated with the economic benefits it brings.

### *c. Reasonable*

Firstly, the policy on the development of the circular economic model has not been formulated in a specific and clear manner. Vietnam does not currently have a legal corridor for circular economic development. The activities of implementing circular economic development are still spontaneous and subject to the adjustment of market dynamics. In addition, the set of criteria for identifying, evaluating, reviewing and accurately classifying the level of the circular economic development by sector, field or locality is very necessary but has not been built yet. build and publish.

Second, awareness of the circular economy and the need to transform to a circular economic model is limited. The right perceptions about circular economy need to be implemented from design to implementation for each industry and field and must be consensus and unanimous from leaders, management levels to each business and citizen. Achieving this is not a small challenge for Vietnam today. In particular, the circulating economy requires the classification and cleaning of waste before being reused and recycled, which is a great challenge to the operational practice of the Vietnamese economy and the sense of fertilizer waste at the people's source. Meanwhile, the communication work to improve understanding about the periodic cycle in Vietnam is still very limited.

Third, the resources for the transition to circular economic development remain weak. Circulating economy must be associated with scientific innovation and access to advanced technology [6]. 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 process. Currently these experts have not been trained much and do not have specialized training. Therefore, science and technology resources and human resources also become a great challenge to overcome.



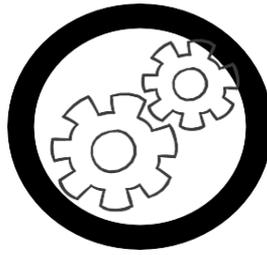
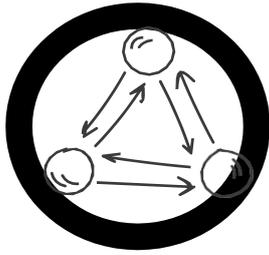
### 3. SOLUTIONS TO DEVELOP THE CIRCULAR ECONOMY IN THE SOUTHEAST

- Develop a detailed and clear roadmap for the transition to circular economic model development, identifying development priorities based on market needs and social requirements. For Vietnam, the first priority is to reduce plastic waste and plastic bags emitted to the environment and include in the next 5-year plan to thoroughly solve this problem on the basis of circular economic development. There are mechanisms and policies for clean technology development, minimizing, reusing and recycling waste, waste must be a resource in the economy in terms of both production and consumption.
- Realizing the circular economy should be associated with technology development, digital economy and industrial revolution 4.0. Technological innovation is the core, an important factor determining the success of applying the circular economic model. In the context of Industrial Revolution 4.0, the active research and creation of alternative technologies is a special factor that needs to be focused on. The new technology will help to implement an efficient circular economy model, reduce pollution emissions, conserve nature and biodiversity, avoid over-exploitation of resources, and create new job opportunities... ensure the target of this model.
- Promote exchanges and cooperation with other countries in the region and around the world to have opportunities to acquire experience and transfer advanced technologies for domestic transition. Promote training to improve the professional qualifications of staff in the cyclic economy. Develop a Cyclic Economic Communication Strategy to increase awareness among manufacturers and the public about their responsibility for products throughout their lifecycle. In particular, it is necessary to raise people's awareness of the separation of waste at source, facilitate the collection, transportation, reuse, and recycling to be more convenient and easier.
- There should be a clear legal corridor for the formation and development of a circular economy, from the Party's policies to the laws of the State. Experiences in countries that have been implementing a circular economy have clear laws and legal regulations. Vietnam needs to have a roadmap and move towards building laws for circular economic development. It is necessary to carry out extensive research on circular economic development from a global general approach, principles set by sectors and fields, deploy models and criteria of the circular economic model, from which choose to apply specific applications to the practical situation of Vietnam and widely disseminate it to businesses, people, and managers to have a correct perception.

- Circulating economic development needs to be based on sectors, fields and localities that have been implementing economic models close to the circular economic approach, thereby complementing and making appropriate choices suitable for each industry and field from pilot to replication. Create a mechanism to form market dynamics based on the criteria of investment efficiency, encourage businesses, people, especially the private sector to invest, develop fields in the circular economy, clearly defining the role of enterprises in the implementation of circular economic development.
- Strengthen exchange and learn from international experiences, especially countries that have been successfully implementing the circular economy, thereby transferring and applying it to specific circumstances of Vietnam. Circulating economic models are associated with high technology and the Fourth Industrial Revolution, so there should be mechanisms and policies for clean technology development, reuse, recycling of waste and waste. become a resource in the economy in terms of both production and consumption. Implementing circular economic development should have a roadmap and prioritize development based on market needs and social requirements. For Vietnam, the first priority is that plastic waste and plastic bags must be implemented and included in the next 5-year plan to thoroughly tackle and minimize emissions to the environment on the basis of development circular economy. The problem that needs to be resolved immediately for Vietnam is the separation of waste at source and waste after being sorted must be collected, cleaned, transported, reused, recycled. Waste separation at source must become a mandatory requirement, a cultural assessment criterion for the people.

#### 4. CONCLUSION

In order to develop a circular economy in Vietnam, it is necessary to understand the nature and justification of this development method. In order to develop a circular economy, it is necessary to review and evaluate existing development models for the agricultural, industrial and service sectors, and then identify development ways close to economic approaches. periodic economy is the basis for development according to the criteria of the circular economy. It is important to be aware of the opportunities to take advantage of these opportunities, and on the other hand see the challenges to the circular economic development that will be faced in order to take remedial measures. As a region with a particularly important role in socio-economic development of the country, the Southeast region has the conditions and advantages for industrial and service development, taking the lead in the industrial cause industrialization and modernization; to develop high-tech industries, electronics, informatics, oil and gas industries and petrochemical products; to develop high-end services, tourism services, telecommunications services, finance and banking; research, application and deployment of science and technology, training of highly qualified human resources are expected to be the highlight of a breakthrough in general development. To develop the economic of the southern key economic region on the basis of exploiting resources and bringing into play the potentials and advantages of geographical location, natural conditions and infrastructure system of the region in order to build the region. The Southern key economic zone has become one of the dynamic economic development regions with high and sustainable economic growth rate, really being the driving economic region of the country, playing a decisive role in contributing into the overall economic growth of the country. Taking the lead in the industrialization and modernization of the country and in a number of important fields, contributing to improving quality, efficiency and international competitiveness, taking the lead in the trend of international economic integration to create a driving force for the development of the Southeast region.



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