

# ECONOMÍA CIRCULAR VERDE: UN ANÁLISIS BASADO EN LA TEORÍA DE LOS RECURSOS Y LAS CAPACIDADES

## CIRCULAR GREEN ECONOMY: AN ANALYSIS BASED ON THE THEORY OF RESOURCES AND CAPABILITIES

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- **RESUMEN:** El objetivo principal de la presente investigación fue analizar el modelo de la Economía Circular y Verde (ECV) desde el punto de vista de los recursos y capacidades de la organización. En cuanto al diseño y metodología: empleado en la presente investigación fue de tipo descriptivo y correlacional mediante el marco VRIO (Valor, rareza, inimitabilidad y organización). Los resultados obtenidos demuestran que la EC representa un factor esencial dentro de un plano operativo con un impacto social. Asimismo, al ser utilizado como un recurso interno de la empresa se convierte en una ventaja competitiva a través de los recursos y capacidades. Los hallazgos son relevantes y de gran valor debido a que actualmente no hay suficientes investigaciones que estén enfocados en las variables analizadas sobre el sector empresarial.
- **PALABRAS CLAVE:** Economía Circular, Recursos y Capacidades, Análisis VRIO, Estrategia.

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*Economía coyuntural, Revista de temas de coyuntura y perspectivas, ISSN 2415-0630 (en línea) ISSN 2415-0622 (impresa), vol.5 n°1, 37-69, ene-mar 2020.*

<https://doi.org/10.5281/zenodo.3746594>

- **ABSTRACT:** The main objective of the present investigation was to analyze the model of the Circular and Green Economy (CGE) from the point of view of the resources and capacities of the organization. Regarding the design and methodology: used in this research was descriptive and correlational through the VRIO framework (Value, rarity, inimitability and organization). The results obtained show that CE represents an essential factor within an operational level with a social impact. Also, when used as an internal resource of the company, it becomes a competitive advantage through resources and capabilities. The findings are relevant and of great value because there are currently not enough investigations that are focused on the variables analyzed on the business sector.
- **KEY WORDS:** Circular Economy, Resources and Capacities, VRIO Analysis, Strategy.
- **CLASIFICACIÓN JEL:** D24, D21.
- Recepción: 30/10/2019 Aceptación: 07/02/2020

## **INTRODUCCIÓN**

In recent decades, the care of the planet has begun to appear on international political agendas as a matter of urgent concern, since we have begun to notice the consequences of the decisions taken by past generations to obtain economic benefits without worrying about the damage to the environment they caused (Brundtland, 1987; Cezarino, Liboni, Oliveira Stefanelli, Oliveira, & Stocco, 2019). As such, it has been decided that it is time to worry and take measures to survive in a planet of limited resources with a population that does not stop growing.

Beyond the individual responsibility, those who can make a noticeable change and chain reaction are the companies that, regardless of size or classification, are important actors in the global scope since they have an active role in the degradation or preservation of its environment close to social,

economic and environmental level. Then, it can be considered that it is of vital importance that companies begin to have the main goal of achieving sustainability.

That is why the Circular Economy (CE) represents an essential factor that arises from the reengineering of existing products or the creation of new products that are generated (Unal, Urbinati, & Chiaroni, 2018). According to the Ellen MacArthur Foundation, an organization dedicated to the study and dissemination of the circular economy, the beginning of the concept as such has not been registered, but is the result of an evolution of several schools of thought such as Regenerative Design, economics of performance, industrial ecology, biomimetics, blue economy and natural capitalism.

In this sense, regenerative design it is a school of thought that focuses on the theory of systems oriented to design processes. That is, the theory emphasizes the fact that existing processes are modified to improve, eliminate or adhere new sources of energy and / or materials (Morlet, et al., 2016). Therefore, the regenerative design has a base derived from the ecology of the systems that is responsible for providing a biokinetics in the ecosystems (Ballie & Woods, 2018) with the aim of achieving an ecological economy system (Gleason Espíndola, Cordova, & Casiano Flores, 2018) that is viable and closed for any industry (Liakos, et al., 2019). It also seeks to ensure that the resulting system does not generate waste, which is completely effective, to achieve this it is necessary to redesign the culture of human habitats (Heaven Grown, s.f.).

According to the European Commission, the regenerative design will impact the processes at the social level through the generation of jobs, in economic competitiveness (Ecointeligencia, 2017), in the new distribution in

the use of resources and waste. The CE promotes a performance economy in companies (Kumar, Sezersan, Garza-Reyes, Gonzalez, & AL-Shboul, 2019) through four main objectives to extend the useful life of existing products, generate new products that are considered durable from their design, think of campaigns or activities for the prevention of waste and reuse of these (Bocken, De Pauw, Bakker, & Van der Grinten, 2016; Ellen MacArthur Foundation, 2019). Therefore, the green circle economy is one of the essential sustainability factors in SMEs.

## **2. GREEN ECONOMY, GREEN GROWTH AND SUSTAINABLE DEVELOPMENT**

The green economy concept is called the next oxymoron after sustainable development because they overlap each other (Green & McCann, 2011). Conference on Sustainable Development (Rio+20) in 2012 agreed that in the context of sustainable development, the concept of green economy should be promoted. The transition to a green economy has economic and social justifications for public and private actors to contribute offering opportunities for investments and green procurement by providing new market-based incentives and mechanisms (Shimova, 2019; Popkova, Bogoviz, & Ragulina, 2018).

It is because the green economy prioritizes well-being for the present and for future generations and the efficiency of improved technology is not necessarily sufficient. Likewise, a green economy is essential for sustainable development (Popkova, Bogoviz, & Ragulina, 2018; Shimova, 2019), improving social equity, human well-being, reducing ecological scarcity and environmental risks. Green economy supports sustainable development aimed to replace the social and environmental costs of the current economic

model that is reaching limits in terms of greenhouse gas emissions, use of natural resources, water, land, forests (Barry, 2010).

Green economy (GE) transformation and inclusive greener growth strategy initiatives are needed to pursue the economic and social benefits of sustainable development (Zsolnai, 2002) while reducing negative environmental, inequality and poverty impacts, sustainable management of natural resources, reduce greenhouse gas emissions, climate change, resilience to natural disasters, improve public services (Barry, 2010; Jones & Wynn, 2019). Green economy and sustainable development strategies strengthen the resilience of communities and regions.

In this sense, the GE supports sustainable development aimed at replacing the social and environmental costs (Gliedt & Parker, 2007) of the current economic model that is reaching limits in terms of greenhouse gas emissions, use of natural resources, water, land, forests, etc. Initiatives are needed to pursue the economic and social benefits of sustainable development while reducing negative impacts on the environment, inequality and poverty, sustainable management of natural resources, greenhouse gas emissions, change climate, resistance to natural disasters, improvement of public services (Popkova, Bogoviz, & Ragulina, 2018). GE and sustainable development strategies strengthen the resilience of communities and regions such as SMEs (Bıçakcıoğlu, Theoharakis, & Tanyeri, 2019; Gliedt & Parker, 2007)

Green growth responds to critical emerging issues by facing the global challenge of environmental sustainability. However, the elements of the green economy concept are already integrated in strategic documents focused on achieving sustainable green growth, rather than merely achieving a green

economy. Green growth is based upon the sustainable development strategies used to support the transition to green economy defined as the process of improving the economic, social and cultural and environmental well-being of future generations.

Likewise, the GE promotes economic growth and development, ensures the natural assets that provide environmental resources and services for the benefit of humanity's well-being, focusing on synergies and compensation between sustainable environmental and economic development. The interactions between society and the environment drive change and the transformation of the green economy as an opportunity to achieve sustainable development and human well-being. It is worth seeking the green economy as an opportunity to prioritize well-being and sustainable development for the present and for future generations.

According to Klingenberg and Kochanowski, (2015) GE is one of the tools used to achieve the sustainable (Shimova, 2019) development goals (SDGs) of eradicating poverty, hunger and food security, good health and wellness, education, gender equality and empowerment of women, water and sanitation, energy, economic growth, infrastructure, industrialization, inequality, cities, sustainable consumption and production, climate change, oceans, biodiversity, associations (Popkova, Bogoviz, & Ragulina, 2018). The socio-ecological and SDG indicators of the green economy described go beyond GDP as a transformative concept to measure wellness (Ferguson 2014; Fioramonti 2014; Stiglitz et al. 2009). The visions of the green economy are relevant to the legitimacy and the global green economy under the SDGs.

It should be noted that ecological sectors and industries (Shurrab, Hussain, & Khan, 2019) have the potential to become engines of ecological

growth by reducing the use of fossil fuels as climate-resistant development. Some of the most relevant sectors for the green economy are agriculture (Sbicca, 2019), energy , water management, tourism, waste (Haldar, 2019). In this sense, green growth policies promote economic growth and environmental development by ensuring that natural resources provide environmental services for human wellness.

Green economy is a critical component of sustainable development which implies a greening change in the social construct of all the economy sectors. Details about the scale of the greening of specific sectors of the green economy development and implementation are required to be explicitly for absolute decoupling. Rural and urban development programs are a vehicle for enabling the transition from traditional rural and urban economy to a rural and urban green economy. Locally led development programs and group actions can often respond more effectively to local needs in the transition to the green economy. Urban green brands are already developing focusing more on green growth and low carbon economy which may be stronger and attract greater interest.

Green economy approaches offer economic opportunities of low carbon transitions under the framework of an agreement of a collective carbon finance goal (United Nations 2015). Resource and energy efficiency supports green products, services and low-carbon green economy as part of the transition to deliver economic, social and environmental benefits. Low carbon actions are part of a transition towards green economies can make the most of the resources available. The transition towards a green economy by investing and preserving the natural capital to generate growth, create jobs and eradicate poverty. A green job is defined as one that works with information, data, technologies, and materials, and requires specialized

knowledge, training, skills, and experience for activities that minimize environmental impact.

The green economy concept is mutually complementary between different dimensions of sustainable development and poverty eradication to enhance convergence through different approaches, among which are the internalization of externalities, systemic economic structure, reconciling social goals, policies and objectives and the macroeconomic framework of development strategy (UNDESA 2010).

The design of green economy to contribute to sustainable development is away from the dysfunctionalities of traditional mainstream economy and results in human well-being and equitable access to opportunities safeguarding economic and environmental economic integrity. Green economy contributes to sustainable development with different forms of implementation for different countries. Resource efficiency is a green economy process is supported by environmental awareness and technological green innovation, although the increase in consumption may occur when efficiency gains are lost leading to the so called Jevons paradox, which may be addressed by specific policies on fiscal mechanisms and education.

### **3. GREEN ECONOMY PRINCIPLES**

Guiding principles of a Green Economy helping practitioners in the application of the green economy concept are sustaining that it is a means for sustainable development, is equitable, just and fair, creating green jobs, protects biodiversity and ecosystem services, provide green resources and efficient green energy within the ecological limits, delivers well-being, access to essential services, poverty reduction, livelihoods, social protection. The



principles of a green economy that according to GEC deliver a sustainable, inclusive and participative green economy are: sustainability, justice, dignity, healthy planet, inclusion, good governance and accountability, resilience, efficiency and sufficiency and generations.

The sustainable development and green economy strategies and policies is a model based on the core principles of economic efficiency, equity, social inclusion, environmental sufficiency and accountability which requires dialogue among all the involved stakeholders and participative policy design. Also, these principles consider the measurement of green economy using appropriate metrics and indicators, internalizes externalities, improves governance and the rule of law being democratic, participatory, inclusive, transparent and accountable and more other principles. A good indicator of the relevance of green growth and economy for a specific society is to identify the number or share of population involved in any form, as employee, consumer, etc.

Equitable green economy is linked to sustainable development supported by principles and informed by policy and market decisions. Green economy principles must be integrated in sustainable development programs and initiatives such as in pollution prevention and sustainable production and consumption. Green economy principles aimed to develop a fair and inclusive economy to provide a better quality of life are the sustainability, justice, dignity, healthy planet, inclusion, good governance and accountability, resilience, efficiency and sufficiency and generations principles (Green Economy Coalition 2012).

Green economy principles can be applied to urban sustainable development by coordinating some deliverables with other organizations and

donors relating to methodologies, platforms, best practices and tools that contribute to poverty eradication (UNCSD, 2012).

Green economy principles must be developed after engaging in discussion with the different stakeholders to meet the vision, priorities and needs of each sector. A set of green economy principles emerging from dialogue can serve as guidelines for making decisions which can be applied across sectors and institutions to operationalize a green economy. Social equity, ecological limits and community ownership are core principles for green economy.

#### **4. TRANSFORMATIONAL TRANSITION OF GREEN ECONOMY**

The transition towards green economy can solve the interconnected economic, social, and environmental crises. Green economy and transformation as enabling approaches are related to potentially create dynamic change (Pelling and Manuel Navarrete 2011; Pelling et al. 2014). Green economies integrate economic, social and environmental activities. The concept of green economy represents a transition for more environmentally friendly and resource-efficiency technologies to tackle environmental degradation by reducing carbon emissions and mitigating the effects of climate change (Jänicke 2012).

Transition to green economies require that green activities and investments in the interlinkages between rural-urban areas can contribute to green economic growth. Public and private funding of green economy has to be scaled up at all institutional levels and sectors supporting sustainable and responsible green investments in green business and companies, clean technology, green investments, etc. A green company is defined as a company

that produces goods and services designed to reduce their environmental impact.

Green technologies should be developed with government financial support and subject to wider dissemination. Private investment flows in green technology should ensure that achieve full potential in spin-off benefits. Any percentage of global GDP invested to green economy sectors increase the growth, employment and reduce water, energy, etc. Public and private investments in green economy, promote revenue growth and employment from a rational use of natural and financial resources and energy efficiency that reduce carbon emissions and pollution and prevent loss of biodiversity and environmental services.

Development programs structured according priorities supports transition to the green economy in practice although the term may not be explicitly used, planning authorities may use different approaches and measures. Design and implementation of rural and urban and urban development programs support the transition of business activities to the green economy and the environmental performance. Development programs can provide financial support to support the transition towards a green economy with impact in long-term business opportunities. Business can foster practices that contribute to the green economy transition.

Equitable green economy is a transformation process in constant dynamic progression, although it has been questioned if green economy is equitable. One of the four green economy typologies is green transformation of economic growth through political interventions (Death 2015, 2216). Building on Ferguson's typologies based on weak/strong green economy, the UNEP's concept is more transformational providing enabling conditions for

green economy transitions (UNEP 2011). Transformational green economy renders strong green economy and growth concepts deployed as organizing principles for climate change (Pelling et al. 2014).

The term green economy comprises the application of some economic instruments which requires social, institutional and political contexts to harness economic activities in support of sustainable development goals. Design of development plans can contribute to the transition to the green economy activities such as mitigation of climate warming, sustainable water and waste management, sustainable infrastructure, ecosystems services and buildings, investment in natural resources and capital, renewable energy feedstocks and energy efficiency, green research, green tourism and eco-innovation, agricultural and forest land management, forestry and fisheries (bio economics) green manufacturing and supply chain green public procurement, etc.

The transition to the green economy makes sure that agriculture and forestry are both economically and environmentally sustainable activities for the long-term. For example, the use of procurement policies for the greening of business. Green agriculture requires natural and physical capital assets, knowledge and financial investments and enhance the capacity building in efficient and sustainable management of soil fertility, water use, farm mechanization, crop and livestock diversification; etc. the analysis of investments measures benefits and costs of green economy and green energy policies taking into account capacity building, management, operation, research and development, expenditures in infrastructure, incentives, etc.

Measures for business and farm diversification can support transition activities to green economy. The sectors considered to have green potential

are energy renewable, water, waste/recycling, sustainable farming and forestry, fisheries, public transport, green buildings, tourism, health care, education and training (Rosenberg, Lotz-Sisitka, & Ramsarup, 2018), green finances, etc.

Greening the fishery sector requires strengthening the fisheries management and financing fishing activities to maintain sustainable stocks within biological limits limit the environmental impact. Assessment of the impact on the dynamics of the fishing and marine ecosystem and biodiversity using quantitative indicators for socio-economic factors is required for a more effective exploitation of fisheries.

Greening the sector of forestry must be focused on reducing deforestation and increasing reforestation in accordance with economic and market mechanisms including payments for ecosystem services, certified benefit sharing and other schemes, community-based partnerships, sustainable forest management instruments aimed to carbon reduction, enhance protection of forests against fires and pollution, biodiversity and forest ecosystems, provision of environmental services, etc.

Greening the industry and manufacturing sector implies design to extend the useful life of goods and recycling them to support the use of by-products and alternatives for substitution to achieve a circular economy with a close-loop manufacturing in eco-industrial parks.

Greening the building sector requires a policy framework with instruments for development of sustainable building capacities and standards, cost-efficiency and incentives. Greening building requires investment and incentives for energy supply and renewable performance for sustainability of new and renovated buildings.

Greening transport policies intend to integrate land use and transportation planning for more environmentally efficient modes shifting to non-motorized transport and improving vehicle and fuel technology, avoiding or reducing trips and using water and rail transport for freight. All these policies are aimed to reduce the negative environmental and social effects. A greening transport policy framework to enhance sustainability through greener and efficient roads includes a strategy focused on the cost of transport in terms of environmental damage to society and reducing noise pollution.

Greening the tourism sector can be done by increasing the involvement of the local community in the tourism value chain and the interplay between internal factors and structural conditions.

Greening the waste management sector requires decoupling waste from economic growth and addressing the challenges of increasing the recycle rate of electrical and electronic equipment or e-waste, turning bio mass waste into recovered energy and other valuable resources, reducing food waste in the food chain, etc. The treatment of waste in the whole cycle from waste generation to waste disposal, should emphasize recovery for reuse and recycling of waste materials. Strategy for the prevention of industrial waste are based on industrial symbiosis resulting of collaboration to facilitate the exchange of by-products, water, energy and other materials.

Greening the water sector requires water management based on quality standards, to increase investments with better financial arrangements, to achieve a more efficient water supply, to improve the institutional arrangements and allocation systems, entitlements and use of payments for ecosystem services.

Green economy transition is relevant to all economic sectors and requires a change in their economic activities perspective. Green economic transformation should be supported by new institutional forms for organization and decision making supported by participation and collaboration structures between public, private and community agents and actors for sharing resources and knowledge in green economic activities. One of these economic transformations into green economy is the circular economy.

## **5. CIRCULAR ECONOMY (CE)**

Since its creation, the Circular Economy has been defined in different ways, in order to make it more understandable and easy to transmit for its application. Here are three ways to define this concept:

- 1) Claudia García Caicedo, in her publication *Circular economy and its role in sustainable design and innovation*, mentions that the Circular Economy aims to achieve product designs that reduce or completely eliminate waste, and also seeks to ensure that products are simple to dismantle-disassemble for reuse in new products. The CE is also responsible for defining business models that are exclusively dedicated to companies that apply the Circular Economy in their processes to achieve sustainable innovation and consequently feel economically motivated to recover their product after fulfilling its main function, use it again in manufacturing and repeating the cycle (Caicedo García, 2017).
- 2) Catalina Balboa and Manuel Domínguez, in their work *Circular economy as a framework for ecodesign: the ECO-3 model*, define CE as a "philosophy of systems organization inspired by living beings,

which pursued the change of an economy linear (produce, use and throw) increasingly difficult to implement due to the depletion of resources towards a circular and regenerative model, as occurs in nature and which also represents a great opportunity in the business world "(Balboa & Domínguez Somonte, 2014). The interesting thing in the definition of Balboa and Dominguez is that they mention it as a way to try to solve the problem of scarcity of resources.

- 3) The Ellen MacArthur Foundation mentions that the Circular Economy usually has other names related to the schools of thought on which it is based, and that were already mentioned above, for example: economy of the cradle to the cradle or economy of closed loop (Ellen MacArthur Foundation (2), 2019). It is important to mention that this foundation declares that the defenders of the theory do not consider the Circular Economy as part of an ecological movement, but as a form of improvement of the design.

## **6. CONCEPTUAL BACKGROUND**

### **STRATEGY**

To define the strategy, the present work was based on the works of Michael Eugene Porter. This author defines the strategy as a differentiator that is created by making choices about several options that in the end would generate a unique value combination. Based on the conclusion by Porter, what really defines a strategy are the activities to which it specializes, that is, decision making is conditioned by the company's interest in differentiating itself from the competition. If the above is not respected, competitive advantage would not work as a differentiator but as an idea of marketing (Porter, 1996).



Porter talks about how a strategy can scale a company in the market, and become a strategic position. This position comes from three sources that sometimes work together:

- 1) Positioning based on the variety of products or services that exist in the area. The companies that use this positioning are usually those that have a better possibility of producing some good or service due to certain special characteristics that only they handle in the process.
- 2) Positioning based on needs, is one that is responsible for trying to meet the needs, or most of these, of a certain group of people. In a market there are many types of customers who request special products, which require certain characteristics in the good they want to buy, with different tastes or preferences, so they usually need guidance, support or very specific services.
- 3) Positioning by customer segmentation according to the way to access them or positioning based on access. Normally, this type of positioning is determined by the position or geographic location in which the client of interest is located. It can also be determined by the dimension or some specific situation that would hinder or hinder easy access to the client.

According to Porter, usually more threats come from sources outside the organization. When a strategy becomes part of a competitive advantage, it is likely to be threatened by changes in areas such as technology or the actions of competitors. It is mentioned that the event that can cause a certain strategy to fail is internal to the firm, and is mainly due to the underestimation of rival

companies in the industry, poor planning, lack of information, or great ambition to grow without finalizing details.

### **SUSTAINABILITY**

The term Sustainability does not have a precise definition by itself, it is a rather ambiguous term that derives from the word sustainable, an adjective that implies "that can be maintained for a long time without exhausting resources or causing serious damage to the environment" (RAE, 2017, page sp). We can also find that Sustainability comes from Latin etymologies such as sustenance, sustenance, sustentare, sustentavi, sustentatum, which mean: sustain, maintain in good condition, care, conserve, support, favor (Ecología UNAM, 2015). In practice, we define Sustainability as a process that aims to ensure the satisfaction of the needs of the current and future generations.

### **COMPETITIVE ADVANTAGE**

Competitive advantage can be defined as the essential aspect that demonstrates the performance of markets that are competitive, over the years the focus on competitive advantage has been lost to focus on the diversification and growth of organizations (Porter, 2015). Porter declares that the source or origin of the competitive advantage is the value that the firm generates in its products or services to satisfy the clientele, in other words, it is considered as a plus that manages to surpass the competition, even when the rivals try reach the company that has an advantage of this kind. In Porter's book "Competitive Strategy" he describes three general strategies for achieving competitive advantage: cost leadership, differentiation and concentration.

## **THEORETICAL BACKGROUND**

The main objective of any firm is to generate high rates of return, in other words, obtain profits. Because of this, in the research work *Sustainable Competitive Advantage: Combining Institutional and Resource-Based Views*, Christine Oliver decided to create a hybrid model that would include the Approaches Based on Resources and Institutions, in this way the Model of the Advantage was born. Competitive Sustainable This author mentions that the reason why the resource-based approach is not only used is due to its limitations (Oliver, 1998):

- 1) Explain the heterogeneity of companies through the properties of resources and the markets of resources.
- 2) Does not worry about including the social context, which affects the decision making about the use of resources.
- 3) It does not talk about how the selection of resources is made.

By including the Institutional Approach, we seek to complete the spaces left, in the social sphere, by the Resource-based Approach, so that the Institutional will contribute (Oliver, 1998):

- 1) A study on how social influence affects decision making within a company.
- 2) It will show us the close relationship that exists between the selection of resources and sustainable competitive advantage in relation to decision making.

- 3) The importance of having an "institutional context" in the three levels of the company:
  - a) Individual level, are the normal and individual values.
  - b) Company level, are represented by the organizational culture and politics.
  - c) Inter-company level, as an example: public relations and its pressure on the market, regulations and standards faced by firms.

Oliver also inspected the general notions of the new hybrid approach of the Sustainable Competitive Advantage, which turned out to be the following:

- 1) The model divides decision making into three levels, as does the institutional one: Individual or managerial choice, company level, and inter-company.
- 2) Includes the way in which managers select resources and capacities, that is, the decision of which resources and capacities to implement.
- 3) Determines that in order to create and apply strategies, resources and institutional regulations must be taken into account.
- 4) It defines what is a capacity, resources and its idea of sustainability of an advantage that must be competitive.
- 5) Its analytical model consists of three determinants that assure us a sustainable competitive advantage, if it is integrated in the right way: those based on resources, such as managerial decisions; the selection of resources, the heterogeneity of the company; the institutional

determinants: rational / individual regulation, institutional / business factors, and isomorphic pressure / between companies.

In relation to the selection of resources for its application, this new approach mentions that there are three cases in which it is more likely that a company is willing to acquire them or use the ones they have in reserve (Oliver, 1998):

- 1) When resources are acquired that are not major for the company, in this way we managers do not feel that they are risking their main activity.
- 2) Companies tend to be traditional, they are affected by their institutional part, so the acquisition of resources must belong to the same item that the company manages.
- 3) When a resource of the company is no longer considered productive, it is time to acquire new, since the organization does not feel so threatened by the change. The opportunity cost will have less impact.
- 4) The accumulated resources should be periodically monitored to know what we have and what we can use.
- 5) The training of the assets of the company helps them to know how to use potential resources.
- 6) From the moment of hiring, people with attitudes that have a notion of the use of resources for an optimal management should be chosen.

From the point of view of the Institutions approach, there are certain assumptions that would allow achieving a sustainable competitive advantage, in relation to the use of valuable resources (Oliver, 1998):

- 1) The acquisition of a valuable resource will be accepted by the company when it does not violate the regulations or the corporate culture.
- 2) The acquisition will be accepted if senior management gives it political support.
- 3) For reasons of power struggle, certain valuable resources will be acquired if with it the power of a decisive voter increases or strengthens its place in the company.

The creation of a model that unites the two approaches was necessary, since all approaches have deficiencies that tend to focus too much on production, resources or institutions and their regulations at different levels. This theory also shows concern for the factors that affect the individual as such and the impact that this would have on the decision-making process when selecting resources and applying them in the correct manner. The Focus of the Sustainable Competitive Advantage can be considered as an advance in the evolution of the strategies, since not only is oriented to obtain an objective, but also it is in charge of making known how to achieve it.

## **7. RESEARCH METHODS**

Although the theoretical perspective that will be used in the present work is the theory of resources and capacities slightly influenced by the approach of the institutions, an analysis will be carried out through the VRIO Framework (Value, rarity, inimitability, and organization) to determine if The Circular Economy model could be considered as a viable resource as a competitive advantage that allows the company to achieve its objectives and position itself in the market, which would generate a competitive strategy.

## 8. ANALYSIS OF RESULTS

As already mentioned before, the tool that will be used to analyze the situation of the Circular Economy as a competitive resource within an organization, is through an internal analysis called Marco VRIO. First the analysis will be shown in the form of a table and after the explanation will be made by means of the answer to the four questions that this frame generates.

To obtain the results, the research work matrix was used as a base: ICT as a source of competitive advantage in SMEs (Moncada Niño & Oviedo Franco, 2013). The pertinent changes were made to be able to apply it in this specific case, shown below:

Table 1 Matrix VRIO - Competitive Implications

Valuable?	Rarity?	Expensive to imitate?	Exploited by the organization?	Strength or weakness	Competitive implication
NO			NO	Weakness	Competitive disadvantage
SI	NO			Strength	Competitive parity
SI	SI	NO		Strength	Temporary Competitive Advantage
SI	SI	SI	SI	Strength	Sustainable Competitive Advantage

Source: Moncada Niño & Oviedo Franco, (2013)

**VRIO ANALYSIS (TABLE)**

Table 2 VRIO Analysis: The Circular Economy as a business resource

<b>Concept</b>	<b>Answer</b>
<b>Valuable:</b> is it a valuable resource to achieve an advantage?	<b>Yes</b>
<b>Rarity:</b> is it being used by a small group of firms?	<b>Yes</b>
<b>Inimitability:</b> is it expensive to imitate?	<b>Yes</b>
<b>Organization:</b> Is the organization prepared in its policies and procedures to use this resource?	<b>NO</b>
<b>Strength or weakness:</b> is it considered a strength or a weakness	Strength
<b>Competitive implication:</b> results.	<b>Temporary Competitive Advantage</b>

Source: Own elaboration

**VRIO ANALYSIS (BY CONCEPT)**

A Next, the explanation of the previous table, concept by concept, in addition to the specific interpretation to this particular case:

Valuable: answer the following question: is it a valuable resource to gain an advantage? According to Álvaro Fernando Moncada Niño and Martha Lucía Oviedo Franco in their work, valuable resources are considered those that can be used as a response to external threats, and in turn, help take advantage of opportunities. "The definition of the value of the resource or capacity is related to its possibility to exploit an opportunity or mitigate a threat in the market. If one of those two things is done, it can be considered as a strength of the company; otherwise, it is a weakness. When these are properly exploited, they generally lead to an increase in income or a decrease in costs or both "(Moncada Niño & Oviedo Franco, 2013, page 129).



Due to the above, the Circular economy can be considered a valuable asset, by exploiting the opportunity to reduce costs and reduce the waste generated by the company through a reengineering of processes and design.

The VRIO framework considers that resources must be rare, limited or unique, that is, very few companies are using it in their activities, otherwise the resource would not serve as a competitive advantage. If the rarity remains, and few companies manage to acquire it this would mean that the resource would remain scarce, which would give it the characteristic of sustainable competitive advantage (Moncada Niño & Oviedo Franco, 2013). The Circular Economy is a scarce resource that has not been applied in a large number of companies due to its complexity, but it is very likely that this rarity is not held too long, because of the changes in the policies related to sustainability and its derivatives, so it is considered as a temporary competitive advantage.

Inimitability: is it expensive to imitate? "... resources are inimitable when the possibility for competitors to analyze and duplicate them makes their acquisition or acquisition costly or takes too long to replicate" (Moncada Niño & Oviedo Franco, 2013, page 129). This characteristic of the VRIO Framework is usually related to the previous two, since the cost of use or application directly affects the rarity and its value. The CE is considered an inimitable resource, because when applied it would be considered quite expensive, since the generation of totally new designs thinking about the reduction of waste is expensive at the beginning, not any company can achieve it.

Organization: Is the organization prepared in its policies and procedures to use this resource? "Relating to the fact that the company has certain organizational aspects, such as the organizational structure, processes and systems, as well as the business culture itself, to exploit the full

competitive potential of its resources and capabilities. Therefore, the resources and capacities have to be exploited efficiently by the company "(Moncada Niño & Oviedo Franco, 2013, page 130).

When referring to this characteristic, it is deduced that the companies are not prepared, in their great majority, to install and use the Circular Economy, due to the great complexity changes and improvements necessary for an optimal operation.

## **9. CONCLUSIONS AND RECOMMENDATIONS**

At the beginning, it was mentioned that this document aims to determine if the Circular Economy is a resource with the aim of becoming a competitive advantage that will impact on the focus of resources and capabilities. In this specific case, it turns out that, if it has the majority of the features of the VRIO Framework that allow it to be a competitive advantage, but of a temporary nature, because in the Rarity it is considered that in the coming years the business political demands will change, forcing companies to look for ways to include this type of model, regardless of the cost.

As a recommendation, it can be highlighted that organizations that wish to implement this model in their activities will need to have a good economic position. The initial costs of application are usually very high as a result of the changes that must be made from the root of the product: the design of this.

According to the results obtained in the present investigation, the EC is considered as one of the main factors that SMEs should consider carrying out re-engineering in the products they develop as in those that they generate through the innovation they generate. In this sense, the results are focused on those proposed by Ünal, Urbinati and Chiaroni, 2018.

Likewise, for the business sector, the EC turns out to be a competitive advantage that can be used for SMEs to develop a green economy through the EC, being a strategy that can position not only in national markets but also international markets. In conclusion, it was proved that the Circular Economy can be considered as a competitive advantage, but of a temporary nature according to the characteristics of the VRIO Framework.

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## KEY TERMS AND DEFINITIONS

**Circular economy:** The circular economy proposes an economic and productive model characterized by sustainability and saving of resources and energy sources in which goods are produced, consumed, recycled, produced and re-consumed, entering a life cycle. circular.

**Green economy:** That which leads to the improvement of human well-being and social equality, while environmental risks and ecological scarcity are significantly reduced.

**Green growth:** The one that promote economic growth and development while ensuring that natural assets continue to provide the environmental resources and services on which our well-being depends.

**Resources and capabilities:** The theory of resources and capabilities states that organizations are different from each other based on the resources and capabilities they have at a given time, as well as the different characteristics of the same and that these resources and capabilities are not available to all companies in the same.

**Strategic plan:** It is a document integrated in the business plan that includes the planning at the economic-financial, strategic and organizational level with which a company or organization has to address its objectives and achieve its future mission.

**Sustainable development:** It is development that meets the needs of the present without compromising the ability of future generations to meet their own needs

**Transformation:** The result of a process of change of form. It happens when one thing, fact or idea is converted into another.

**Transition:** A [change](#) from one [form](#) or [type](#) to another, or the [process](#) by which this [happens](#).

**VRIO Analysis:** VRIO analysis is an internal business analysis tool that is included in the theory of resources and responds to the four basic characteristics that a resource must meet to give the company a competitive advantage.