

# GREEN ENTERPRISES AS A SUSTAINABILITY ALTERNATIVE IN THE DEPARTMENT OF CESAR

**Edwin Iván Vásquez Pino**

Popular University of Cesar  
Valledupar, Cesar, Colombia  
[edwinvasquez@unicesar.edu.co](mailto:edwinvasquez@unicesar.edu.co)

**Janeth Montero Morón**

Popular University of Cesar  
Valledupar, Cesar, Colombia  
[janetmontero@unicesar.edu.co](mailto:janetmontero@unicesar.edu.co)

**Rubén Dario Marrufo Garcia**

Popular University of Cesar  
Valledupar, Cesar, Colombia  
[rubenmarrufo@unicesar.edu.co](mailto:rubenmarrufo@unicesar.edu.co)

**Eider Javier Núñez Pérez**

Popular University of Cesar  
Valledupar, Cesar, Colombia  
[eidernunez@unicesar.edu.co](mailto:eidernunez@unicesar.edu.co)

Date of Receipt: 14/03/2024 –Date of Acceptance: 06/06/2024

DOI: <https://doi.org/10.36995/j.visiondefuturo.2025.30.01.004.en>

## ABSTRACT

This article aims to analyze green entrepreneurship as a sustainability alternative in the Cesar department. It is framed within a qualitative methodology, specifically a documentary review type, using hermeneutics concerning green entrepreneurship and sustainability, which go hand in hand. The goal is to create businesses with the environment in mind, generating clean processes and considering future generations. This leads to the conclusion that it is a model for creating companies based on environmental consciousness, abandoning the traditional model of nature destruction. It can be referred to by different names such as eco-entrepreneurship, sustainable entrepreneurship, and environmental entrepreneurship. However, such types of ventures are difficult to find in the city of Valledupar. The green entrepreneurship model is based on four stages: identification, design, implementation, and evaluation, considering four green principles that contribute to the sustainable development of the business. Taking the aforementioned situation into account, the first stage will explain each step in detail and identify existing issues in the company, the second stage will design the strategy based on the four green principles, the third stage will execute the design through the strategic planning matrix, and finally, the fourth stage will evaluate according to the traffic light technology.

**KEY WORDS:** Green Entrepreneurship; Green Entrepreneurship Stages; Sustainability

## INTRODUCTION

Nowadays, green entrepreneurship in many companies globally is aimed at caring for the planet, being a reaction to the resulting social changes. There is more and more information



about the importance of taking care of the environment demonstrates the professional mission of many entrepreneurs who implement business ideas, incorporate environmental sustainability into their business plans as a necessary plan for success.

Hence the importance of green entrepreneurship, it seeks to preserve the environment, it seeks to be consistent in the different areas of the business, as well as in the economy. However, when talking about sustainability worldwide, emphasis is placed on the evolution of today's society to a more environmentally responsible society. It is a development model aimed at ensuring a balance between economic growth, environmental protection and social welfare. (Pereira & Medina, 2013)

As a roadmap to achieve sustainable development, according to the United Nations, the 2030 Agenda for Sustainable Development took place in September 2015, proposing the sustainable development goals as a set of shared goals to protect the planet and ensure the well-being of society. By adopting this new strategy, states commit to mobilizing all necessary means to implement the strategy over the next 15 years. (López Contreras & Martínez Pastrana, 2016)

On the other hand, he comments that entrepreneurs in Latin America are increasingly aiming for green entrepreneurship, that is, leveraging their activities in sustainable development without affecting the environment or future generations, in their value chain they include an ecological green room thanks to ecological materials that transmit respect for the environment. Likewise, in order to offer the best products to customers, it is necessary to work with suppliers who are committed to this green philosophy. (Sanabria, Hurtado, & Pedraza, 2014)

However, doing business in this field is to enhance differentiation from various brands, which generate added value that allows you to have an official certification to demonstrate a commitment to nature. Green entrepreneurship can be adapted to various business formats, the entrepreneur provides solutions to customers while maintaining natural heritage, they are companies that incorporate the sustainable economy into their business plans. A venture starts with an idea, but most of them suggest an entrepreneurial mindset.

On the other hand, (Hurtados, 2016), comments in his research that green entrepreneurship provides innovative and sustainable business opportunities with the potential to respond to economic and environmental needs and problems with a positive environmental impact, improving people's quality of life. Offer value.

On the other hand, Según, former director of the Green Business Office in Colombia, says that there are no studies that show that these businesses have an impact on GDP, but he assures that the potential could be considerable due to the country's development characteristics of this type of goods and services. All developments in the sustainability sector in Colombia are marked by this trend, which greatly affects the financial sustainability,

profitability and profit of companies because, despite their positive impact on the environment, the products they develop tend to have very high costs and the market still has them. they do not prioritize or differentiate their impact on the environment and on their pocketbook. (Mira, 2019)

In this sense, the importance of analyzing green entrepreneurship as a sustainability alternative in the department of Cesar, always thinking about sustainable development, that is, incorporating the sustainable economy into its plans. In other words, it is the entrepreneur himself who puts his own values into practice through his work and transmits them, therefore it is necessary that in the city of Valledupar, this type of entrepreneurship is promoted always thinking about future generations.

Consequently, every entrepreneur in Valledupar must seek to meet current needs without putting future needs at risk. This takes into account social, economic development and environmental protection within a governance framework. Maintain productivity in addition to biological diversity over time, in this way conserve natural resources, promote responsible ecology, while growing in human development, taking care of the environment in which we live. Now there are several companies in this area of the department of Cesar, there is a long way to go.

## **DEVELOPMENT**

### **Green Entrepreneurship**

According to , they state that it is a process of conceiving and modeling innovative and sustainable business opportunities with the potential for realization that responds to economic, environmental and social needs and problems that have a positive impact on the environment, thus improving people's quality of life. , comments that it is oriented towards an environmentally friendly management system for efficient and sustainable management. A management that does not harm the company's environment, in addition to being included in a so-called "green company". This concern has made it possible to develop various standards that describe the conditions that these management systems must meet as well as the necessary requirements for their implementation.(Luis & Flores, 2016)(Necuesa, 2016)

On the other hand, they report that economic activities that provide goods or services generate a positive environmental impact by combining the best environmental, social, and economic practices with a life cycle approach that helps protect the environment as natural capital that supports the development of territories. For the purposes of this research, a position is established with what is stated by , who says that the development of activities aimed at alleviating, reducing or eliminating environmental problems, which were initially considered innovative insofar as they proposed changes in production and consumption patterns. (Ojeda & Rodriguez, 2018)(Luis & Flores, 2016)



## **Green entrepreneurship from the economic point of view**

Economic entrepreneurship "is a new technology for innovative business management" that stimulates the emergence of new initiatives that promote national economic growth and development, new companies that are more competitive than traditional ones because they are built around information, knowledge and business leadership.(Blanco, 2016)

On the other hand, from the perspective of organizational theory, the innovation process has not been fully developed, and it is believed that the management of innovation and entrepreneurship is a motivating factor of this phenomenon. According to the theory of innovation in innovation generation, the core to strengthen the performance of innovative behavior lies not only in the innovative attitude of the "entrepreneurial" members of the organization, but also in the sociocultural factors that stimulate the process by politicians. In accordance with the theoretical approach to knowledge management of the entrepreneurial entrepreneur". (Vazquez Moreno, 2016, pág. 37)

However, in reference to the doctrines consulted, there is agreement with , when it is stated that economic entrepreneurship stimulates the emergence of new initiatives that promote national economic growth and development. These startups are more competitive than traditional companies because they are built around information and knowledge.(Blanco, 2016)

Finally, such entrepreneurship must go hand in hand with economic sustainability by emphasizing the responsible use of resources to support economic growth and long-term stability. It involves practices such as investing in sustainable businesses, promoting fair trade, and fostering economic development that benefits current and future generations. By prioritizing economic sustainability, we can create a more prosperous and equitable society. (Gómez Romero, 2020)

## **Stages of Green Entrepreneurship**

According to the criteria of (Plaza León, Banegas Campoverde,, & Castillo Ortega, 2021), They report that there are four stages to take into account when starting a green business, which are mentioned below:

Stage. 1 National Environment (Identification) - Local strategic partner - Operating parameters - Qualification and training of technical advisors - Prepare local guides for green businesses. - Proposal of a legal framework to promote green business.

Stage 2. Communication, Awareness and Diagnosis (Design) - launch - 4 transmission sessions - 15 awareness seminars/workshops - Media, social media and website brochures - Technical support for business diagnostics - evaluation and selection of projects, rejection or extension of acceptance - Intensive business and technical training.

Stage 3 (Execution) - First payment: start and/or improve - Second expense: business plan and business sustainability - Third Payment (Last Payment): Independent Evaluation of Strategic Partners.

Stage 4 (Final Evaluation) - Field trips and lessons learned - Financial audit at all levels.

According to , they say that it is necessary to establish the importance of a culture of innovation from green entrepreneurship, in order to promote development from within. One factor in a knowledge society is the pervasiveness of a culture of innovation, which is a way to build sustained long-term growth. However, for innovation to be an effective practice in any country, it is essential to promote a technological culture and innovative attitudes that are adjusted to the needs and characteristics of its socioeconomic environment.(Chica López & Zaldumbide-Peralvoll, 2021)

Likewise, he says that the importance of the culture of innovation as a driver of development must be established in green entrepreneurship, from within it implies analyzing it from a practical point of view: what are the necessary conditions for the culture of innovation to be successful in a given social context? First, consider the strategic aspects of innovative entrepreneurs; related to competition (Drucker, 1994), and second, as a form of business organization, forming and developing networks. (Velazquez, 2019) Analyzing the position of , the four stages mentioned above must be articulated in order to achieve the objectives used by the entrepreneurs, such as the identification of the project, execution, sustainability, among other aspects.(Plaza León, Banegas Campoverde,, & Castillo Ortega, 2021)

### **Importance of green entrepreneurship in innovation**

(Vazquez, 2018) states that it is a process of growth and structural change, resulting from the transfer of resources from traditional to modern activities, the exploitation of external economies and the introduction of innovation, and produces an increase in the well-being of urban populations. For his part, (Garcia, 2016) he points out that the conceptualization of endogenous development is based on a theoretical character, and proposes that external economies stimulate the growth of productivity and the production of the factors of production and other empirical growth from organizational theory.

It also (Bossier, 2017) states that it is a process of economic growth and structural change that includes various dimensions, including the economic, socio-cultural and political foundations of the development process. It is therefore important that the regional public administration and the commercial, financial and social entities of the region participate in the creation of an innovative environment that goes hand in hand with sustainable development.

## **Green Agriculture**

For (Hinojosa Benavides, Ruggerths Neil de la Cruz , & Espinoza Quispe, 2021), he refers that green agriculture is a human activity that tends to combine different procedures and knowledge to treat the land with the aim of producing foods of plant origin such as fruits, vegetables, grains, etc. Agriculture is an economic activity that belongs to primary industry and includes all human actions aimed at altering the surrounding environment to make it more suitable, which translates into greater soil productivity and food consumption or subsequent industrial processing derived from direct value.

On the other hand (Laura , Hernández, Parra, & Vallejo, 2018), agriculture is a series of economic activities related to the cultivation of the land and the processing of fertile soil to produce food. As such, it includes all those technologies and human actions that focus on extracting food from the natural environment. To understand it better, agriculture encompasses all those economic activities that focus on cultivating the land and treating the soil. This is extracted food. So everything from the production of various fruits to the rice fields in Asia.

However (Laborde Debucquet & Christophe , 2021), they refer that the support of green agriculture is the prerogative of national governments. The positive impact on global development will require considerable policy coordination among all countries, since the support that currently, there is very little support for green agriculture, that is, the poorest countries have less access from the state, for this type of agricultural activity, it is necessary to develop sustainable agricultural technologies and practices. that adapt to local circumstances, as farmers in these countries face greater barriers to adapting to these practices. To make a difference at the global level, an equitable distribution of technical and financial resources is necessary so that all countries can benefit from green agriculture.

However (Felix , Bekele Hundie, Oyakhilomen , Karamoko , & Birhanu Zemadim , 2022), they state that green agriculture implies structural changes within societies that incorporate agriculture, since a greater supply of food allows the growth of the population and makes possible the development of life, becoming increasingly complex societies, with a greater division of labor, new rules of coexistence and with a greater development of the agricultural sector. Indiscriminate and irresponsible agriculture can have a very serious impact on the environment. In recent decades, there has been a worrying increase in intensive production at an industrial level, with the use of different chemicals and fertilizers altering the natural growth process of food and its impact on consumer health.

## **Production of agricultural products**

(Caicedo Aldaz, Puyol Cortez, López, & Ibáñez Jacome, 2016), they refer that agricultural production is the result of the development of the land to obtain basic products, mainly grains and various vegetables, that is, agricultural production is the fruit of sowing and



harvesting from the field. This is primarily to obtain edible goods for human consumption, although some of these can be used in value-added industries. An example of the latter is cotton sold to the textile sector.

At the same time, (Laura, et al., 2018), the result, fruit or product of the development of the land (agriculture) through the cultivation and harvesting of vegetables in the field for human consumption. Obtaining goods, services, and products such as bread, fruits, grains, vegetables, etc. in various ways – to produce agriculture for human food satisfaction, and as an industry that adds value for various purposes in society, the origin of agricultural production begins with the first search for people in search of food to survive, moving from place to place until in the Stone Age, humans learned to cultivate the land and gain greater productivity and survival surpluses.

To be sustainable (Gudbrand , Subal , Ashok , & Brian , 2022), agriculture must meet the needs of present and future generations while ensuring profitability, environmental health, and social and economic equity. In this sense, in agricultural production, production risks play an important role. Therefore, we believe that it is necessary to consider production risks when specifying and estimating production rates in a risky environment. Most previous studies focused on risk and productivity have used production functions as analytical tools.

Finally, despite the importance of principles and guidelines to assess the sustainability of agricultural productions without impacting the environment, it has been difficult for the groups involved in such processes to agree on standards, let alone guidelines, so that several shortcomings persist in the implementation of the guidelines remains quite limited. Some people believe that imposing general and rigid guidelines may not be consistent with the specific conditions of each agricultural region and may even inhibit the diversity of agricultural production methods, which is not conducive to the development of sustainable agriculture. Others believe that the science behind such audits is not yet ready. Another problem with many certification programs is that they judge farmers.

### **Agricultural marketing**

He refers (Laura , Hernández, Parra, & Vallejo, 2018) that agricultural marketing can be defined as a series of services that move a product from the point of production to the point of consumption. Thus, agricultural marketing comprises a series of interrelated activities, from production planning, planting and harvesting, packaging, transportation, storage, processing, distribution and sale of agricultural products and food products. These activities cannot be carried out without an exchange of information and often depend on adequate funding. Marketing systems are dynamic, competitive, and involve continuous change and improvement.

Thriving businesses are those that cost less, are more efficient, and can offer quality products. Those with high costs, marketing should be consumer-facing while also providing benefits to farmers, shippers, traders, processors, and more. This requires those involved in the marketing chain to understand the needs of the buyer, including product and business conditions.

In the same vein (Rincón, Aguilera, Zarvarce, & Leal, 2018), agricultural marketing is a process that allows products to reach consumers in urban areas far from agricultural areas, and the number of operations and functions it performs determines the level of sophistication of the process. In this way, it can be said that marketing is a set of processes or stages that a product has to go through during its transfer from the producer to the final consumer.

## **Sustainability**

The term sustainable development was coined and disseminated by the World Commission on Environment and Development in its 1987 report *Our Common Future*. According to the Commission's definition, sustainable development or sustainable development is defined as progress that meets many of the needs of the present without compromising the ability of future generations to meet their own needs. This means improving the quality of human life without exceeding the carrying capacity of the ecosystems that support it.

(Vazquez, 2018), states that sustainability represents a change from today's society to a more environmentally friendly society. It is a development model whose objective is to ensure a balance between economic growth, environmental protection and social welfare. Likewise (Bossier, 2017), it states that sustainability seeks that people should be the recipients of development, their well-being should be the central objective of national policy and world relations. Human development is considered to be a process that can ensure long-term sustainability, as a number of unknown and unpredictable factors and interrelationships remain.

Sustainability is defined as the means to compensate for today's needs without compromising the ability of future generations to meet their own needs. In the context of green entrepreneurship, sustainability involves the creation of companies that are economically viable, environmentally responsible. Sustainable green companies focus on the triple bottom line, considering the impact of their business activities on people, the planet, and profits. The importance of sustainability in green entrepreneurship cannot be underestimated, as it ensures that businesses operate in an environmentally friendly manner that is socially beneficial. (Cordera Campos, 2017)

In reference to the sources consulted, a position is established with (Vazquez, 2018), who refers that sustainability represents a change from today's society to one that is more



respectful of the environment. It is a development model whose objective is to ensure a balance between economic growth, environmental protection and social welfare.

### **Growth and sustainable development strategies**

Initially, it was believed that economic growth strategies alone could lead to a better quality of life for a country's residents. The economic growth of a country is to the extent that there is a prosperous economic dynamic, explained by a growing population, (Brida, 2018) refers to a stable macroeconomic environment that favors investment, characterized by stable interest rates, low and controlled inflation, controlled and single-digit unemployment levels promotes the sustainable development of companies, The State plays an important role in the economic stability of entrepreneurs.

On the other hand (Díaz Ariza, García Castiblanco, & Aguilar Galeano, 2023), he comments that the growth strategies of sustainable development is green exporting, if used as an end in themselves, will generate human development for the majority of the current and future population of a country or region. Thus, there are market failures or failures that do not allow an efficient evaluation of resources, therefore, today it is a global priority. Multilateralism has been driving the transition agenda towards a more sustainable economy. Latin America is not immune to this movement: for nearly a decade, countries in the region have been developing national plans to support "green growth."

Evaluating the authors' positions, a position is taken with (Brida, 2018), stating that in a stable macroeconomic environment conducive to investment, characterized by stable interest rates, low and controllable inflation, and controllable and single-digit unemployment, promoting the sustainable development of companies, the State plays an important role in the economy in the development of business stability.

### **Ecological footprint**

(Bossier, 2017), affirms that any process of growth, projection, action, except in any task, is fundamental and essential for the purposes of guaranteeing the balance of nature, taking into account the impact of such declarations on the environment and therefore on ecosystems. In this way, a term is used whose concept and objectives allow the determination of these impacts, this is the so-called ecological footprint.

On the other hand, (Vazquez, 2018) he explains that the transformation process involves the use of natural or artificial resources to produce goods or assets, so the structure of the planet on which we live has undergone small changes whose impact on the environment is imperceptible individually, but as a whole can make major changes in the environment. Finally, (Garcia, 2016) he believes that in every project, activity or work the impact on the environment and what will be done to reverse the damage that may be caused will be considered.

There is agreement with what he states with (Bossier, 2017) when he says each task, each process of growth, foresight, action is fundamental and essential for the purpose of guaranteeing a natural balance, taking into account the environmental impact of these claims, therefore, ecosystem. In this way, a term is used whose concept and objectives allow the determination of these impacts, the so-called ecological footprint.

### **Humanistic sustainability**

When mentioning humanism, (Garcia, 2016) he refers to human capital being higher than economic capital, since the purpose is not economic income, but the well-being of the population. According to the United Nations Development Programme (2016), human development is people-centred development, which includes the promotion of human potential, the increase of human possibilities and the enjoyment of the freedom to live the lives that are important to them.

In the same vein, (Vazquez, 2018) it states that human development is the process by which a society improves the living conditions of its citizens, increasing the goods that satisfy their basic and complementary needs, and creating an environment in which people's human rights are realized. Everyone is respected. In this sense, an indicator has been established to try to measure human development, known as the Human Development Index (HDI), which is a way of measuring human development by country. The index is prepared by the United Nations Development Programme (UNDP). Is the HDI a statistical social indicator that consists of three? Parameters:

- Long and healthy life (measured by life expectancy at birth).
- Education (measured by the adult literacy rate and the combined gross enrolment ratio in primary, secondary and tertiary education, as well as the years of compulsory education).
- Decent standard of living (measured by GDP per capita PPP in dollars).
- A development from within, considering the transfer of knowledge from the outside, as well as using local empowerment, aims to allow precisely this Human Development Index to be increased to values of living standards adequate to enhance the dignity of a good life.

### **Resources for sustainable development**

(Franco, 2016), states that the pursuit of these objectives must contemplate the available resources or those that the company can provide, they should never be defined with resources that the company is not capable of giving. Likewise, the identification of the resources of the feasibility study follows the same pattern considered by the previous objectives, which must be reviewed and evaluated if the project is executed, and these resources are analyzed based on three completely different aspects:

- **Operational Feasibility:** It refers to all the resources (processes) involved in a given activity and depends on the human resources involved during the operation of the project. In this stage, all those activities necessary to achieve the objective are identified and everything necessary to execute it is evaluated and determined.

- **Technical Feasibility:** Refers to the necessary resources such as tools, knowledge, skills, experience, etc. necessary to carry out the activities or processes required by the project. We usually refer to tangible (measurable) elements. Projects should consider whether existing technical resources are necessary or need to be complementary.

- **Economic Feasibility:** Refers to the economic and financial resources necessary to develop or carry out an activity or process and/or acquire basic resources, and must take into account the cost of time, the cost of completion and the cost of acquiring new resources. Overall, economic viability is the most important factor, as it is through which other shortcomings in other resources, which are the most difficult to achieve and require additional activities when they are not available, can be filled.

On the other hand, (Neményi, Ambrus, & Teschner, 2023) he states that it is important to harmonize between social sustainability and green agriculture means the coordination of multiple complex systems. A generally accepted definition of social sustainability is the unification of the pillars of social development, as well as the unification of the pillars of social development, economic growth and environmental protection.

## **Methodology**

The present research has a qualitative paradigm, for ,(Martinez, 2010) it teaches how qualitative methodology is indispensable when it comes to studies that understand and seek explanations; because with their structures, the dynamic systems of human relations are strengthened; which are not necessarily composed of homogeneous elements; on the contrary, it is characterized by its complexity, heterogeneity and variability. Demonstrating how qualitative research seeks to provide procedures and instruments to explore the multiplicity of realities, subjectivities and convergences in the various social groups and organizations.

On the other hand (Hernandez Sampieri, 2018), he says that it is an approach guided by important areas of research or research topics. Qualitative methods use data collection and analysis to refine research questions or discover new questions during interpretation, the present research seeks to analyze green entrepreneurship as an alternative for sustainability in the department of Cesar, through a review of primary and secondary sources using hermeneutics. In such a way that (Veléz, 2012), he proposed that qualitative research has a theoretical basis, that is, in the search for such a theory it is possible to conceptually interpret

the empirical data found, and it can also be interpreted as: finding the data confront the assumptions or questions raised by the authors of this work.

However, according to the method, it was located in a review area that, according to the method, (Álvarez Venegas, Paredes Hernández, & Arteaga Pérez, 2015) refers to this type of research being based on the review of documents, manuals, journals, periodicals, scientific reports, conclusions and seminars and/or publications of any type considered sources of information.

Likewise, (Perez, 2013) it says that the documentary review perceives, records, analyzes and interprets the nature of the documents in question, in such a way that it studies the composition of processes or phenomena and assimilates the truth of the facts. The essential characteristic is to arrive at an explanation. On the other hand, (Clavee, 2014) as the process of searching, selecting, reading, recording, organizing, describing, analyzing and interpreting data on a question extracted from existing bibliographic sources to answer the question, however, in the present research both primary and secondary sources were selected to deepen the variables under study such as green entrepreneurship and sustainability, and thus have the theoretical foundations and give depth to the present research.

For them, refereed articles from Scopus, Dialnet, Scielo among others were consulted, using keywords such as green entrepreneurship, stages of green entrepreneurship, sustainability, among others, followed by the bibliographic search, the documents that made up the research were selected, which provided relevant information for the research under study, they were studied in a detailed way, using interpretative hermeneutics, as well as an integrated analysis, where the most representative contributions that the researchers presented in their various studies were extracted, making a documentary review matrix. After analyzing each article, the content is classified according to the coincidences that exist between them, in addition to highlighting the elements most related to the research topic so that the findings and conclusions drawn can finally be presented.

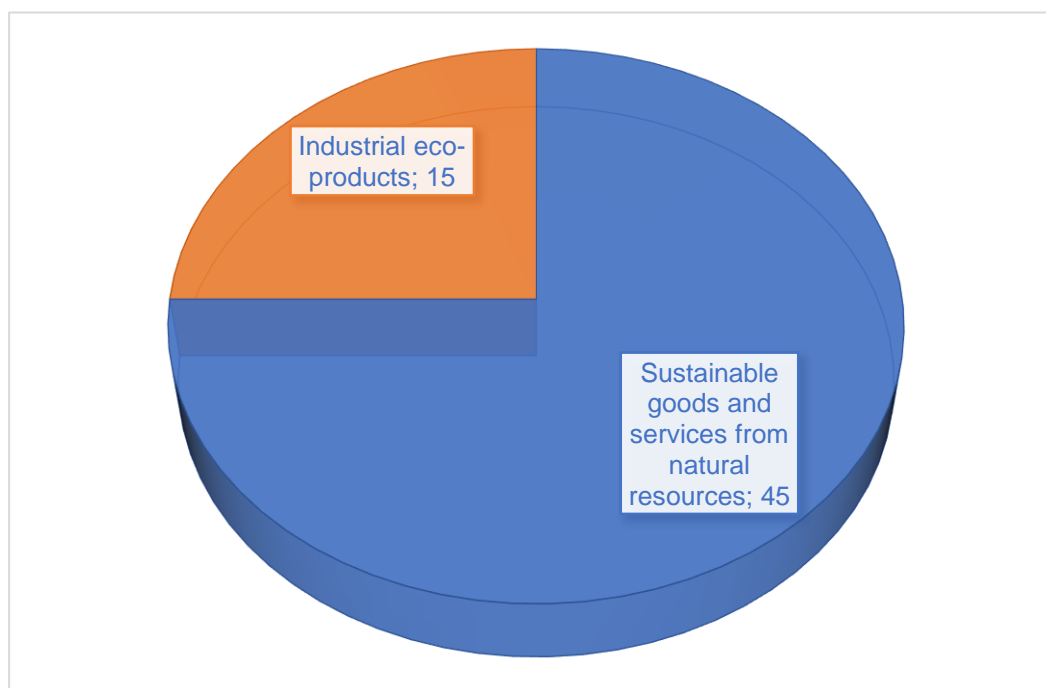
## **Analysis and Discussion of the results**

Once all the concepts of green entrepreneurship have been analyzed, it is clear that many companies in Valledupar are far from reaching that model of entrepreneurship that seeks a way to plan, organize, direct, as well as control the actions of companies. This, in turn, should emphasize the contextual relationship with the external and internal environment, the first of which is about providing inputs, human resources, customers, while the second should consider three approaches, which are: management roles, decision-making, and dynamics. Systems, as expressed According to (Luis & Flores, 2016), expressing that it is a process to conceive and model innovative and sustainable business opportunities with potential. However, it is difficult to get innovative projects in the department of Cesar that generate clean

energy, hence the importance of this type of research that generates a different value proposition, generating ecological footprints in all the processes of the value chain, as he refers (Mira, 2019) to green entrepreneurship and companies that have developed investment in this sector of the economy. as shown in graph number 1.

**Figure 1**

Sustainable goods and services from natural resources Sustainable goods and services from



Note. Own elaboration

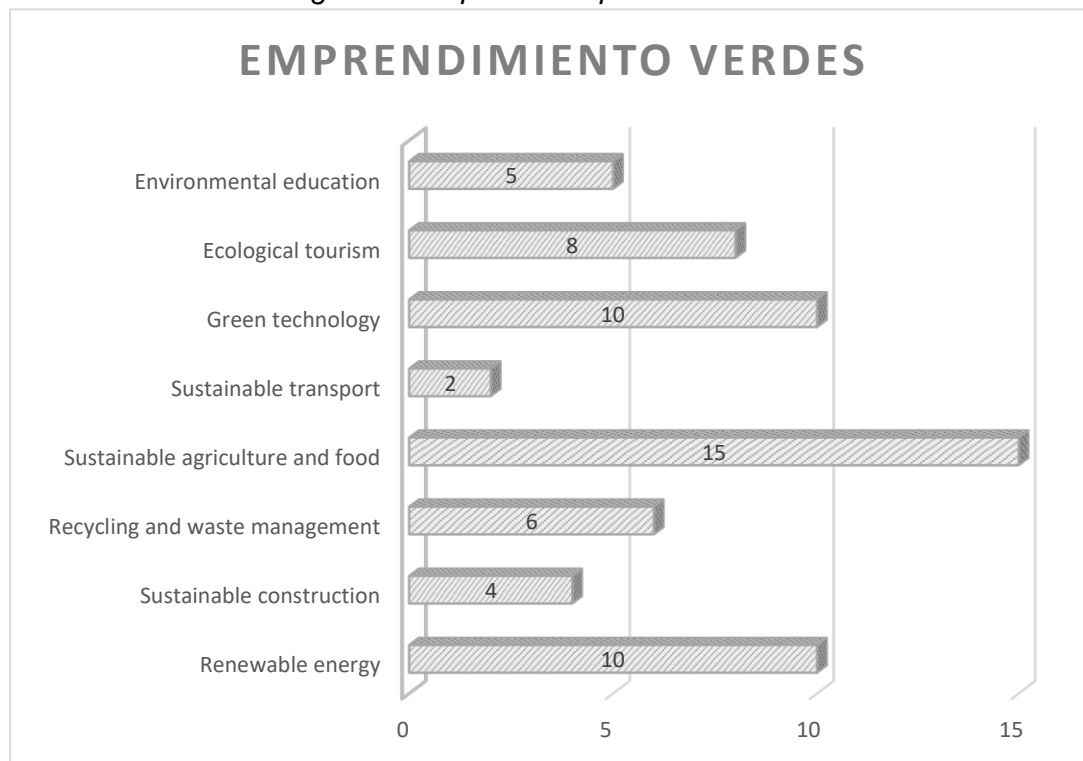
As shown in the graph developed in the research carried out by , a total of 60 companies have oriented their efforts to undertake sustainable goods and services, as well as eco-products, which shows that there are entrepreneurs who have taken this initiative in the department, Composed of entrepreneurs, productive units and micro-entrepreneurs dedicated to economic activities related to sustainable agricultural systems, use and recycling of waste, biotrade, non-traditional renewable energy sources, sustainable construction (Mira, 2019)

However, those entrepreneurs who want to orient their green entrepreneurship, accompanied by sustainability, must start with a product and/or service life cycle model: It allows products and processes to be designed without losing the environmental, social, and cultural perspective, in addition to anticipating and avoiding possible impacts. So to speak, it is nothing more than the design of new products and processes in a system that employs change strategies that go beyond eco-efficiency, as expressed (Franco, 2016), commented that to find these goals, the available resources or what the company can provide must be taken into account. and they should never be defined in terms of what the company can

provide, for this according to research carried out by (Ministerio de Ambiente, 2023) , while for Cesar, there are several sectors of the economy with green entrepreneurship, as shown in figure number 2.

**Figure 2**

*Economic sectors with green entrepreneurship in Cesar*



Note. Own elaboration

As shown in the table, the sector of the economy that invests the most in the department of Cesar is that of Sustainable Agriculture, being organic coffee the one that is most produced in the region, it generates competitive advantages for its flavor, which is a perfect balance between medium acidity, body and medium-high aroma. Characterized by notes of sweet black tea as well as its chocolate texture.

The Green enterprise in Valledupar has shown growth trends, and also has great potential for future prosperity. The city's cultural heritage as well as natural resources provide a good basis for building a sustainable business ecosystem. However, this growth has limitations, such as insufficient infrastructure, limited access to capital, insufficient education and training of entrepreneurs. Despite these challenges, governments can help overcome these barriers by introducing initiatives to promote entrepreneurship. For example, capital constraints can be addressed by creating an enabling business environment through tax incentives, financing and training programs. Providing the necessary infrastructure, such as transport networks, energy, telecommunications facilities, among others, can also improve the business ecosystem



In general terms, entrepreneurs must apply green entrepreneurship in order to generate other productive methods preserving the environment without affecting future generations, through more efficient processes, less use of materials and energy, less waste. Attract investors, especially environmentally conscious investors. Finally, based on the literature review, the following SWOT matrix was constructed, which specifies the different characteristics of green entrepreneurship, classifying them into strengths or weaknesses for growth and identifies the main opportunities they generally face in terms of green entrepreneurship.

**Figure 3**

*SWOT Matrix-factors that affect green entrepreneurship in Valledupar*

<b>Internal factors</b>	<b>Fortress</b>	<b>Weaknesses</b>
	<ol style="list-style-type: none"> <li>1. Focus on environmental sustainability.</li> <li>2. Ability to generate clean processes.</li> <li>3. Attracting environmentally conscious consumers.</li> <li>4. Potential for innovation in green technologies.</li> <li>5. Support from government policies or incentives for sustainable companies.</li> </ol>	<ol style="list-style-type: none"> <li>1. High upfront costs to implement green technologies.</li> <li>2. Lack of experience in managing sustainable businesses.</li> <li>3. Lack of knowledge on environmentally responsible business practices.</li> <li>4. Dependence on the availability of specific natural resources.</li> <li>5. Potential cultural resistance or lack of awareness of the importance of sustainability.</li> </ol>
<b>External factors</b>	<b>Opportunities</b>	<b>Threats</b>
	<ol style="list-style-type: none"> <li>1. Growth in environmental awareness and demand for eco-friendly products and services.</li> <li>2. Availability of funds and grants for sustainable projects.</li> <li>3. Collaboration with environmental organizations and NGOs.</li> <li>4. Expansion of international markets for green products and services.</li> <li>5. Development of strategic alliances with companies committed to sustainability.</li> </ol>	<ol style="list-style-type: none"> <li>1. Competition from unsustainable companies with lower prices.</li> <li>2. Changes in government policies that affect incentives for green companies.</li> <li>3. Volatility in the prices of natural resources.</li> <li>4. Image risk if perceived as "greenwashing"</li> <li>5. Adverse Impacts of Natural Disasters</li> </ol>

*Note.* Own elaboration

## CONCLUSION

When analyzing green entrepreneurship as an alternative of sustainability in the department of Cesar, it is concluded that it bases its model on the creation of companies under the parameters of environmental awareness, abandoning the traditional model of destruction of nature, and can be called with different names, such as: eco-entrepreneurship, eco-entrepreneurship, sustainable entrepreneurship, eco-entrepreneurship and sustainable and environmental entrepreneurship. however, this type of entrepreneurship is difficult to see in Valledupar, it does not mean that in the not distant future entrepreneurs will bet on this way of doing business.

However, the green entrepreneurship model is based on four stages of identification, design, implementation, evaluation and monitoring, it takes into account 5 green principles that contribute to the sustainable development of the business. Considering the above situation, the first stage will explain in detail each stage and find the existing problems in the company, the second stage will design the strategy according to the 5 green principles, the third stage will execute the design through the strategic planning matrix, and finally evaluate according to the traffic light technology, The percentage of progress of the business to be classified as a green business is evaluated.

While the principles and guidelines are important to assess the situation in Valledupar, green entrepreneurship can be a powerful catalyst for making business change, generating innovative solutions to various environmental challenges while creating jobs and driving economic growth. In addition to implementing their business ideas, these entrepreneurs also contribute to reducing global pollution by integrating the use of technologies for green practices into their operations. Green entrepreneurship has a competitive advantage in the market by differentiating itself through sourcing methods, promoting sustainable practices, thus attracting environmentally conscious consumers. In short, green entrepreneurship is a powerful tool for creating sustainable and socially responsible businesses that benefit both the environment and the economy

Finally, the dream of all companies is to achieve sustained profitability and make it increasingly high, however, to achieve this, they must carry out attractive commercial management, in which commercial, marketing, branding, communication and, of course, corporate social responsibility strategies intervene. As mentioned above, there is a fine line between taking care of the risky company's resources and sacrificing the quality of the product/service to achieve better economic profitability. In this sense, the two sustainability strategies must be combined at a point where one does not affect the other, because if so, it would be a company focused on internal savings and not on market action such as the development of new products.



## REFERENCES

- Álvarez Venegas, R., Paredes Hernández, L. M., & Arteaga Pérez, J. (2015). *Methodological guide for the preparation of postgraduate research projects*. Mexico: San Gerónimo International University.
- Blanco, F. (2016). *Opportunities: green, social and technological entrepreneurship*. Madrid: ESIC.
- Bossier, S. (2017). *Competitiveness in search of sustainable development*. Mexico City: McGraw-Hill.
- Brida, J. (2018). Population and economic growth. An improved version of Solow's model. *The Economic Quarter*, 5-22.
- Caicedo Aldaz, J. C., Puyol Cortez, J. L., López, M. C., & Ibáñez Jacome, S. S. (2016). Adaptability in the agricultural production system: A view from sustainable alternative products. *Journal of Social Sciences of the University of Zulú*, 307-325. Retrieved on 02/10, 2024, from <https://www.redalyc.org/journal/280/28065077024/html/>
- Chica López, M. G., & Zaldumbide-Peralvöll, D. A. (2021). Green market policies and their capacity to respond to new ones. *Pole of Knowledge*, 10-36.
- Clavee, A. M. (2014). *How to write and defend a thesis, direction and graphic arts*. Madrid: Madrid.
- Cordera Campos, R. (2017). Globalization in crisis; for sustainable development. *Journal of Economic Literature (JEL)*, 3-12. Retrieved 2024 from 01 of 15, <https://www.sciencedirect.com/science/article/pii/S1665952X17300014>
- Díaz Ariza, D. M., García Castiblanco, C. P., & Aguilar Galeano, E. (2023). Technological development and environmental investment: relevant, but not determinant of green exports in Latin America. *Revista Gestión y Ambiente*, 1-12. doi:<https://doi.org/10.15446/ga.v26n1.103867>
- Felix, B., Bekele Hundie, K., Oyakhilomen, O., Karamoko, S., & Birhanu Zemadim, B. (2022). Farmers' preferences for sustainable intensification attributes in sorghum-based cropping systems: evidence from Mali. *Agriculture and Renewable Food Systems*, 695-706. Retrieved from <https://oar.icrisat.org/12136/>
- Franco, L. M. (2016). *Organizational effectiveness, concepts, development and evaluation*. Madrid: Ediciones Díaz de Santos. Madrid.
- García, P. (2016). *Renewable energy technological foundations and applications*, . Mexico City: McGraw-Hill.
- Gómez Romero, J. A. (2020). Sustainable development or sustainable development, a clarification of the debate. *Tecnura*, 117-133. doi:3 <https://doi.org/10.14483/22487638.15102>
- Gudbrand , L., Subal , K., Ashok , M., & Brian , H. (2022). Does risk management affect productivity of organic rice farmers in India? Evidence from a semiparametric production model6. *European Journal of Operational Research*, 1392-1402. Obtenido de <https://www.sciencedirect.com/science/article/pii/S0377221722002764>
- Hernández Sampieri, R. (2018). *RESEARCH METHODOLOGY: QUANTITATIVE, QUALITATIVE AND MIXED ROUTES*. Mexico: McGraw-Hill Interamerican.

- Hinojosa Benavides, R. A., Ruggerths Neil de la Cruz, M., & Espinoza Quispe, C. E. (2021). RELATIONSHIP WITH AGRICULTURAL DEVELOPMENT INDICATORS. *AGRICULTURAL SCIENCE JOURNALS OF SOUTH AMERICA*, Digital Visionary. doi:<https://doi.org/10.33262/visionariodigital.v5i2.1633>
- Hurtados, S. &. (2016). GREEN ENTREPRENEURSHIP AROUND THE CONSERVATION, RECOVERY OF WATER AND ITS SPACES IN BOGOTÁ, MEDELLÍN (COLOMBIA)\*. *Rev.fac.cienc.econ*, 95.
- Laborde Debucquet, D., & Christophe, G. (2021). REPURPOSING AGRICULTURAL POLICY SUPPORT FOR CLIMATE CHANGE MITIGATION AND ADAPTATION. *Journal of Environmental Economics and Management*, 1-26. Recuperado el 2023 de 12 de 16, de <https://www.sciencedirect.com/science/article/pii/S0095069620301315>
- Laura, N. A., Hernández, M. A., Parra, D. C., & Vallejo, V. (2018). Effect of the implementation of different agricultural systems on soil quality in the municipality of Cachipay, Cundinamarca, Colombia. *Bioagro*, 27-35. Retrieved on 02/10, 2024, from [https://ve.scielo.org/scielo.php?pid=S1316-33612018000100003&script=sci\\_abstract](https://ve.scielo.org/scielo.php?pid=S1316-33612018000100003&script=sci_abstract)
- López Contreras, A. d., & Martínez Pastrana, E. H. (2016). Importance of green business in the global context for the sustainable future of companies and the case of Amtec Andina sustainable future of companies and the case of Amtec Andina. *Retrieved from*, 1-32.
- Luis, R., & Flores, M. (2016). Learners as creators of wealth and regional development. *Public*, 478-564.
- Martinez, M. (2010). *Science and Art in Qualitative Methodology. First reprint. Mexico:: Editorial Trillas. Mexico:: : Editorial Trillas.*
- Ministry of Environment. (2023). *Green Business Portfolio*. Bogota: Sustainable Business Office. Retrieved on 12 01 of 2024, from <https://www.minambiente.gov.co/negocios-verdes/portafolio-de-negocios-verdes/>
- Scope. (March 14, 2019). *www.portafolio.co*. Retrieved from *www.portafolio.co*: <https://www.portafolio.co/negocios/emprendimientos-verdes-conquistan-al-mercado-colombiano-527455>
- Necuesa, M. (2016). What is green entrepreneurship. *Empresariados*, 20-46.
- Neményi, M., Ambrus, B., & Teschner, G. (2023). Challenges of ecocentric sustainable development in agriculture with special attention to the Internet of Things (IoT), an ICT perspective. *Akadémiai Kiadó (AK)*, 113-122. doi:<https://doi.org/10.1556/446.2023.00099>
- Ojeda, M. A., & Rodriguez, A. (2018). *The National Entrepreneurship Ecosystem*. Madrid: Española.
- Pereira, F., & Medina, L. (2013). Global Entrepreneurship Monitor -GEM-Antioquia 2012-2013. In *Global Entrepreneurship Monitor -GEM-Antioquia 2012-2013*. Bogotá: Diciones Sello Javeriano, Colombia.
- Pérez, C. A. (2013). *Methodological guide for research projects before. Fedupel* (4th ed.). Mexico: McGraw Hill.

- Plaza León, I. D., Banegas Campoverde,, C. M., & Castillo Ortega, Y. (2021). Green enterprises: a sustainability alternative for SMEs in the city of Cuenca. *Digital Visionary*, 6-29.
- Rincón, N., Aguilera, G., Zarvarce, E., & Leal, M. (2018). Smallholders and their participation in the agricultural marketing process. *Journal of the Faculty of Agronomy*, 45-67. Retrieved 2024 from 02 of 18, [https://ve.scielo.org/scielo.php?script=sci\\_arttext&pid=S0378-78182004000200007](https://ve.scielo.org/scielo.php?script=sci_arttext&pid=S0378-78182004000200007)
- Sanabria, S., Hurtado, E., & Pedraza, P. (2014). Entrepreneurship as a source of development and strengthening of endogenous capacities for the use of renewable energies. *EAN University*, 12.
- Vázquez Moreno, J. A. (2016). *Business entrepreneurship: the importance of the entrepreneur* (Vol. II). (2nd, Ed.) Madrid: IT Campus academy.
- Vázquez, A. (2018). *The new forces of development*. Madrid: Madrid.
- Velázquez, A. J. (2019). *Development, networks, and innovation. Lessons on Endogenous Development. Pyramid. Madrid*. Madrid: Española.
- Veléz, M. J. (2012). *RESEARCH METHODOLOGY*. Medellín: Ecoe ediciones.

## BIBLIOGRAPHICAL ABSTRACT

Please refer to articles Spanish Biographical abstract.

