

The role of startups in achieving sustainable development in Algeria: Reality and prospects

AGGOUNE Charef
University Center -Mila-
c.aggoun@centre-univ-mila.dz

TAIR Rania
University Center -Mila-
r.ttir@centre-univ-mila.dz

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Abstract :

The topic of sustainable development is one of the current topics, And striving to achieve its goals ensures the fulfillment of the requirements and needs of current and future generations , The green economy is an effective way to achieve these goals through several mechanisms, among them are the so-called green startups, which are characterized by green innovation, which in turn aims to provide new products that are efficient, effective, and most importantly, they are environmentally friendly, or it may provide innovative solutions in the field of financial services and others, such as what green financial technology institutions do, This is what we will refer to in our research paper, which aims to clarify and know the role of green startups in achieving sustainable development. It came to the following conclusions:

- The green innovation activities of green start ps seek to find sustainable creative solutions that contribute to achieving sustainable development;
- Green startups contribute to achieving the dimensions of sustainable development (economic, social and environmental);
- Green financial technology institutions are considered a kind of green emerging institutions, which in turn are trying to achieve sustainable development goals through innovations related to financial technologies... etc., which deal with environmental protection, climate change, the use of clean energy, and others...

Keywords: green startups, sustainable development, green fintech.

Introduction :

The green economy is considered an effective means of achieving the dimensions of sustainable development, as it responds to economic, social and environmental challenges, and contributes to creating a balance between the needs of current and future generations through several mechanisms, including green emerging institutions.

Green startups are an ideal model that combines boosting economic growth with addressing environmental concerns through green innovations, such as contributing to clean energy innovations and utilizing environmentally friendly resources. Given the importance of these innovations, particularly their ability to transform environmental challenges into opportunities for developing innovative, eco-friendly products and services and entering new markets, their scope has diversified . Among these sectors is financial technology (FinTech), leading to the recent emergence of green FinTech companies that address environmental protection, climate change, clean energy use, and other related issues through the development of green financial technologies and instruments. And others. This research paper aims to identify the role of green startups in achieving sustainable development, by posing the following main question:

What role do green startups play in achieving sustainable development?**➤ Importance of the research:**

The importance of the research stems from the importance of its variables, given that sustainable development and green emerging institutions are two important topics that are linked to several important economic, social and environmental dimensions.

➤ methodology:

The research methodology is the descriptive- analytical method ; and the research was divided into three main axes as follows:

First: Green Startups: A Theoretical Approach;

Second: The contribution of green emerging institutions to achieving sustainable development;

The case of the green startup :ThirdIMPAAKT.

First: Green Startups: A Theoretical Approach

1. The concept and characteristics of green startups

Before discussing the concept of green startups , we will first discuss .the concept of startups in general

- According to **Eric Ries** a startup is " a **human entity , designed to ,**
; " **create a new good or service under extreme uncertainty**

It can also be defined as “ **an organization that seeks to market and launch a new product or innovative service targeting a large market, characterized by high uncertainty and high risk in exchange for achieving strong and rapid growth with the potential to reap huge**
” . **profits if it succeeds**

The concept of green startups falls under a broader and more comprehensive concept, which is the **green economy** . The green economy is defined as " **an economic activity that leads to improved human well-being and social justice, while significantly reducing environmental risks and resource scarcity, and is considered a means to achieve the Sustainable Development Goals .** " Today, green, environmentally friendly institutions have become one of the pillars and requirements of .leading business institutions

The concept of a green startup generally refers to an economic institution that invests to make a profit like any other economic institution, but it makes the environmental dimension a central focus of the project it leads. It is considered an environmentally friendly institution that invests in an environmentally sound way , and does not cause any harm. It does not deplete the naturally available resources, and it is careful not to pollute the environment in which it operates. Beyond that, these institutions arise from an innovative and creative idea based especially on the need to protect the .environment and achieve sustainable development

:In conclusion, it can be said that green startups are

Institutions that seek to market innovative goods or services, but whose innovation is eco-friendly and green , are seeking to make a profit on the one hand and meet the needs of the current generation while preserving the rights of future generations by preserving resources and the environment on the other hand.

Green startups are characterized by a range of features that make them top-tier environmentally friendly organizations. Among its most important :features

- **Environmental conservation** : It is based primarily on the idea of not polluting the environment in which it operates , by reducing its waste and byproducts as much as possible, and we find it working to ;recycle them and benefit from them again in the production process
- **Energy conservation** : It is keen to save energy during the production process, so we find, for example, that it saves on electrical energy and often moves towards adopting renewable ;energies
- **Activating the precautionary principle in its activities : This principle is one of the fundamental principles upon which sustainable development is based .** These institutions are characterized by their keenness to apply this principle in all the activities they carry out so as not to cause any harm to the .environment

The work of emerging institutions to achieve these characteristics makes them green and sustainable institutions , so that they produce innovative products in a safe and healthy way, and this qualifies them to play a pivotal role in combating the phenomenon of climate change and reducing polluting emissions... etc., meaning working to achieve what sustainable development calls for

2. The foundations upon which green startups are based

Green startups are based on a set of principles, which can be summarized as follows:

- **Green Contractor** An environmentally friendly contractor is one who integrates environmental, social, and economic aspects into the core of their projects, providing innovative solutions for goods and services produced and consumed, and activities that contribute to . building a green economy
- **Green innovation** , or ecological innovation, means creating products or production processes aimed at addressing environmental problems arising in the product life cycle. It is also known as creating new processes, technologies, systems, and products to avoid or reduce environmental damage. The main goal of green innovation is to provide new, innovative, and environmentally friendly products, such as using modern technology that requires fewer raw materials .and is energy-efficient to the maximum extent
- **Green product** This is the result that the green contractor achieves : through his innovation. Green products are those products that use environmentally friendly materials and are not harmful to human .health

green startups:

Green startups have become the focus of much attention as they seek to achieve sustainable development goals through green innovation, which in turn aims to find solutions to existing environmental problems and challenges and to take advantage of the opportunities provided by the transition to a green economy. The importance of this type of organization :can be summarized as follows

- Green startups seize opportunities from environmental challenges to build emerging ideas. It not only addresses environmental challenges but also sees them as an additional opportunity to enter new, innovative, and sustainable markets, enabling this green approach to:
- ✓ Access to untapped markets;
- ✓ Improving and utilizing resources and competencies more effectively;
- ✓ Achieving cost savings and reducing bills, such as water, energy, etc;

- ✓ Reaching customers and meeting the growing demand for environmentally friendly products due to increased environmental awareness;
- ✓ Obtaining financial and non- financial support, as governments increasingly place great importance on environmental considerations;
- ✓ Improved employee productivity is a result of a clean and safe work environment;
- When startups develop green goods or services, they are trying to find a market based on solutions to existing environmental problems such as drought and finding new energy sources, among others.

4. Challenges facing green startups

Despite the significant importance of green startups, especially in achieving sustainable development, they often face a range of obstacles and challenges that hinder their success. Perhaps the biggest challenge these startups face is their very nature as green. The term "green startup" is relatively new, and banks and investment institutions often perceive them as high-risk, making it difficult to secure funding. Furthermore, these startups often experience bias when seeking incubation from incubators and accelerators due to a perceived lack of green business culture. Governmental obstacles also present a challenge, stemming from the lack of necessary legal frameworks for operating such businesses, in addition to bureaucratic hurdles, slow and inefficient management, and other issues. From another perspective, funding an idea and transforming it into a project is just the beginning. Green startups need a market and customers to purchase their products and services. They often face the challenge of a small and underdeveloped local market, forcing them to struggle to access international markets. All these challenges, and others, make it difficult for many environmentally conscious entrepreneurs to succeed, despite their . perseverance in developing and improving the ecosystem

secondly: The contribution of green startups to achieving the : dimensions of sustainable development

Green startups have a strong influence on the transition towards a sustainable green economy, and the green economy is a means to achieve sustainable development

What distinguishes green startups from other organizations is their adoption of green innovation, whereby green innovation activities seek to find creative and sustainable solutions that contribute to achieving sustainable development, such that

- It contributes to achieving **economic sustainability** Because it has become a central economic factor that contributes significantly to growth and the creation of decent jobs
- It also seeks to achieve **Environmental sustainability** , through the conservation of scarce natural resources such as water, energy, etc. And a means to improve the use and management of these resources in an effective and sustainable way, for example
 - ✓ The Dutch green startup " Factors Fiels" has provided solutions for recycling natural water through a circular rainwater management system, which is the ideal solution for converting heavy seasonal rains into clean water during dry seasons
 - ✓ " The UK- based green startup Desolenator " has developed a technology to use the world's abundant resources such as solar energy and seawater to produce high- quality drinking water. This technology is the most cost-effective and sustainable solution, and the world's first standardized solar thermal desalination technology
- It also offers a range of solutions related to **social sustainability** , in areas such as education, nutrition, and health ... An example of this is the green startup " Partnering" robotic , which launched the first 100% healthy robot that purifies the indoor air of homes and buildings from pollution. It moves independently inside homes and absorbs bacteria, bad smells, and other pollutants , thus contributing to maintaining human health

It can be said that green startups contribute significantly and effectively to achieving sustainable development in its (economic, social and environmental) dimensions, through green innovation activities and green technologies. Among the sectors that are trying to achieve sustainable .development through their activities are financial technology institutions .Especially green financial technology institutions

The concept of green fintech refers to emerging institutions that work innovatively to create an enabling environment for developing financial resources and tools for a more sustainable world(alshamsi, 2021)These . institutions focus on fintech innovations that address environmental protection and climate change by achieving the Sustainable Development Goals (SDGs). These innovations intelligently combine impact goals (such as impacting sustainable development) with business goals (such as impacting revenue and costs). Among the SDGs that thesegreen fintech institutions strive to achieve are : **Goal 7** (Clean and affordable energy); **Goal 8** (Decent work and economic growth); **Goal 11** (Sustainable Cities and Communities); **Goal 12** (Responsible production and consumption); **Goal 13** (Climate Action); **Goal 14** (Life Underwater); **Goal 15** (Life on Earth); **Goal 17** (Partnerships for Goals) (puschmann & all, 2020, pp. 4-5); and below are some examples of green fintech companies ,

Table No. 1: Examples of some green startups in the field of financial technology

Yova offers investments through a digital platform that .combines sustainable impact with attractive returns	
Energy Web operates a decentralized, blockchain- based , .carbon-efficient electricity network	
Porini It is an organization specializing in harnessing the potential of digital technologies for the benefit of .individuals and nature	

Celsiuspro is an insurance company specializing in manufacturing insurance solutions to combat the harmful effects of weather and climate change. Climate and natural .disasters	
South Pole Digital Lab focuses on developing and scaling up digital solutions for managing climate risks and other .environmental hazards	
Blueyellow combines the colors blue and yellow to create green, connecting renewable energy projects with capital through a digital platform and advanced financial .technology solutions	

Prepared by researchers based on (green fintech survey, 2020)

:Based on the above, it can be said that

- Solutions for green startups, especiallygreen fintech It helps accelerate the implementation of the Sustainable Development Goals through green innovations and technologies, the latter combining **innovative digital technologies** that help improve financial services and others . For example : Providing more efficient and less expensive financial services) , as well as **contributing to achieving sustainable development**, given that the institution itself is considered green in one respect (its reliance on technology and attempts to reduce costs, etc.) . On the other hand, through the activities and projects of these institutions in the fields of sustainable ...development such as renewable energies and others

Third: The case of "Green StartupImpaakt "

:An overview of the organization and its activities .1

The idea for the startupImpaakt stemmed : from the following questions

- How can organizations be properly monitored when the information available is limited and reporting standards are so varied?
- How can greenwashing be avoidedtrue impact of an organization on the planet measured?

Businessman Bertrand Gacon faced these challenges firsthand during his 15 years in portfolio management at BNPParibas Wealth Management and Lombard where he said , " **Having good practices does not mean , making a positive impact** , " and, frustrated by the lack of available research and benchmarking tools, decided to come up with his own . solution

behind Impaakt Years of experience working in some of the world's largest financial institutions, with its founders coming from the world of finance, most notably Bertrand Gacon , In 2018 . Gacon co- founded Impaakt a platform that measures institutional sustainability efforts and , overall impact (negative or positive) , meaning it can be considered ((Wikipedia for Impact Investing) , so that anyone can be a contributor, and it offers a training program for citizens, employees, consumers, and others... to become a (Certified Impact Analyst) and be rewarded for each published research. That is, instead of relying on one expert, many analysts and potential contributors are relied upon to conduct the analysis and study the impact (the impact of these institutions on the planet, either positive or negative) so that the outputs of this analysis become an important reference ...for contributors and others (jefford, 2020) (impaakt.com)



The
behind
startup
summarized as follows:

idea
this
can be

.Table No02 : an idea impaakt

Investors direct capital to many different institutions around the world that have a profound impact on our daily lives, either positive or negative, especially with regard to social and environmental issues. Consequently, these institutions have a great deal of power to move .towards a sustainable future	reality
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Sustainable development data, environmental, social and governance issues , and social responsibility reports It measures practices rather than impact The policies describe the outcomes There is no objectivity because the data comes from the institution itself	The problem
First: Turning to the citizens and consumers (the inhabitants of the planet) who feel the impact of these institutions on a daily basis and putting the power in their hands by writing and evaluating those impacts means not relying on a single expert, but rather turning to society to give the final approach to measuring the impact; this is done by designing a single framework for this evaluation based on the Sustainable Development Goals (clearly defining the topics) in a specific structure Second: The resulting data is used to determine the impact of institutions, which can then be used by investors and financial institutions, etc., to allocate money to institutions with the greatest positive impact	the solution

Prepared by researchers based on information from the institution's official website(impaakt.com)

Simply put, this platform integrates both collective intelligence (the analysts participating in the platform) and artificial intelligence by conducting objective and high-quality analysis in order to create new data that provides impact scores (either positive or negative) for different institutions in real time, so that the impact scores reflect the true social and environmental value of the institution and should be in the mind of every . decision-maker (financial institutions, shareholders, etc.)

2. Measuring the impact of institutions towards the Sustainable Development Goals:

Impaakt enables society to understand how institutions impact social and environmental life, in particular... by measuring their impact on the

Sustainable Development Goals using a specific methodology, in order to make better choices so that (impaakt.com)

- When writing about the impact of an institution, it means holding it accountable for its impact and encouraging it to change;
- When assessing the impact of an organization's actions and practices, this means determining the degree of influence of the latter, which are used by people from all over the world are used ...by shareholders, financial institutions, and others

This means that by contributing to this platform, decisions of all types of decision-makers (consumers, shareholders, banks, etc.) can be influenced in order to ensure that funds are allocated to institutions with a positive impact and shares are taken from institutions that harm the planet. The methodology for measuring impact points can be summarized as follows

.Table No03 Methodology for measuring points of influence :

Each analysis published on the platform is categorized by the community according to two dimensions ;Value (positive/negative) .1 .The scale (small/large effect) .2	Analysis and evaluations
The evaluators are not equal; there is <u>a specific knowledge ratio</u> for each evaluator, so that the ratio is calculated immediately at the time the evaluator submits a new rating. In other words, an informed evaluator ("a conscious evaluator") can have several times more weight than a first-time evaluator's rating	Knowledge
With each passing day, <u>the weight of older rankings</u> is slowly reduced so that newer rankings are always favored over older ones, meaning that a ranking published a year ago is worth . half of a ranking published today	decay factor
After applying these calculations, a value score and a scale score are obtained for each analysis, so that these scores are not published for institutions with fewer than 15 ratings, thus ensuring that only strong data is available	Value and Measurement

The weighted average of all value scores is calculated through all scale scores for all analyses associated with a particular institution, and the same is done to calculate the .Sustainable Development Goal scores	Weighted average
Final result : The direct impact of numerous institutions	

Prepared by the researchers based on(impaakt.com)

Among the institutions whose impact was assessed and measured by Impaakt sheMastercard:

- Mastercard is an American institution specializing in credit card .payment systems
- Impact assessments for this institution: 1312 "Impact analyses were "written to produce the latter's impact score
- Impact analysis: 28 "These are sustainability observations relating to ".the organization's activities and the impact they have
- Impact assessments of the Sustainable Development Goals: 15 out of goals 17
- Result: +2.12

impaakt

Explore ▾How It Works ▾Contribute ▾

Read about a company ▾

Log in

Mastercard

Industry

Software & IT Services

Country

United States

Year Added

2018

Impact Ratings

1312

Impact Analyses

28

SDG Covered

15 out of 17

+2.12

+++

Usage of cookies on platform

Many articles and research papers have been published on this platform about the impact of this institution in order to measure its influence, : including those published in February 2022. Titled(jo, 2022)

sustainable card program , Mastercard has enabled more than 100 .organizations to issue sustainable cards

:The most important points included in it are

- A single ordinary plastic card contains 50g of plastic, and in 2019 there were 22.8 billion payment cards in .circulation worldwide, equivalent to 114,000 tons of plastic
- In 2018, Mastercard launched the Green Payments Partnership(GPP) to help the payments industry reduce its reliance on plastic. Through this program, cards are now made from recyclable plastics, bio-recycled materials, or chlorine-.free
- Mastercard has created a guide to help sustain efforts, so the Sustainable Cards program has gained ;momentum with more than 100 institutions in 30 countries
- In 2020, Mastercard establishedthe priceless The Planet Coalition where traders, banks, consumers, and , others work together to restore 100 million trees and thus combat climate change, has also launched a carbon calculator... and the organization's efforts continue in

: Among the published articles is one published in June 2020 entitled (dushyant, 2020)

Master Verification Card's goal is to achieve 100% renewable electricity by 2018

:The most important points included in it are

In 2017, Mastercard set a goal of providing 100% renewable energy across all 133 of its offices in 79 countries. To work towards this goal, Mastercard began installing solar power stations, purchasing renewable energy, and using country-specific renewable energy credits , etc. , and achieved its goal .by 2018

- At the 2019 Climate Leadership Awards ceremony , Mastercard was recognized by the Climate and Energy Solutions Center and the .Climate Registry for achieving its goals

Based on the above, it can be said that :

- Social and environmental challenges are a primary reason for the creation of the startupIMPAKT This organization posits that these . challenges are directly linked to the impact of institutions, particularly negative ones such as pollution and carbon emissions. IMPAKT has created a digital platform to help investors and other stakeholders make informed decisions about institutions as a whole. This is achieved by relying on the platform's outputs (impact feedback) to determine whether these institutions have a positive or negative impact on any of the Sustainable Development Goals, thus .enabling informed investment decisions and other actions

conclusion

This research addresses a crucial and current topic: achieving the dimensions and goals of sustainable development within a green economy, relying on emerging green institutions, which are an important means of effectively contributing to innovative solutions. Green innovation contributes to improving resources and efficiencies and utilizing them more effectively while reducing costs, especially in the field of energy, water, and others... as well as achieving an increasing demand for environmentally friendly products. One of the types of these emerging green institutions that contribute to achieving sustainable development is green financial technology institutions, through the innovative ideas and advanced technologies they offer in the field of financial services, which take into account the goals of .sustainable development

Among the most important findings are the following:

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- Green innovation activities for green startups seek to find sustainable creative solutions that contribute to achieving sustainable development through: effective management of resources and competencies, good use and conservation of energy, in addition to improving production by using environmentally friendly materials ; that are not harmful to human health
 - Green startups contribute to achieving the dimensions of sustainable development, either economically by increasing growth and providing decent jobs, socially by providing solutions in several areas such as health and education, or environmentally by preserving .and managing resources in a sustainable way, etc
 - Green fintech companies are a type of green startup that attempts to achieve sustainable development goals through innovations related to financial technologies, etc., addressing environmental protection, .climate change, clean energy use, and more
 - IMPAAKT was highlighted It was created to encourage investments and other initiatives for institutions with a positive impact on the environment, and to take shares from institutions with a negative impact, by measuring the impact of the latter on the goal or goals of sustainable development, to help stakeholders make appropriate .decisions for these institutions

In light of what was discussed in the research and the results obtained, it became clear that it is necessary to encourage and support people with creative ideas in the field of green economy in particular, and to pay attention to emerging institutions as they provide important solutions in the .field of sustainable development

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