Policies for the transition to a green economy in Algeria: gains and challenges

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Abstract:

This paper sheds light on the policies for transitioning to a green economy in Algeria, the gains it achieves, and the challenges it faces, by addressing the measures taken and that must be taken to transition across the various greening sectors, and shedding light on the projects completed in Algeria as gains for the transition process. While examining the magnitude of the challenges and the extent to which the transition path is affected by them, the paper therefore aims to know the nature of Algerian performance with regard to the gradual abandonment of the brown economy in favor of the green economy, in light of the current achievements and projects and the available capabilities, as well as the various challenges facing the transition process.

Keywords: *Green economy; brown economy; greening; sustainable economy; energy policies.*

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Introduction:

Since the industrial revolution, which was accompanied by a change in economic conditions, until the 1970s and the global crises that accompanied it, which made the industrialized countries continuously reconsider the structure of their economies in conjunction with the world reaching the stage of the technological revolution, and relying on non-renewable energies on a large scale, especially in light of Continuously increasing demand and its uses in economic competition. However, ignoring the environmental aspect led to climate changes represented by global warming and the expansion of the ozone layer, in addition to drought, desertification and floods, phenomena that increased in severity as a result of the excessive use of traditional energy sources in parallel with population pressures, until continued economic growth became a challenge to human existence.

The magnitude of the negative impact of the use of non-renewable energies has forced international organizations, especially non-governmental ones specialized in the environmental field, to call for holding conferences in which environmental developments are discussed, including the "Earth Summit" (Rio de Janeiro 1992) and subsequent summits that called for the adoption of a development model. A new system whose existence is linked to nature automatically and periodically, taking into account the economic, environmental and social aspects, ensuring the use of sustainable resources, reducing carbon emissions, relying on renewable energies and waste recycling, and preventing the loss of biodiversity and the deterioration of the ecosystem in general.

This investment drives the growing demand for green goods and services, as the green or environmental economy has emerged as a model for enhancing global economic growth, so that the transition from the traditional economy to the green economy has become the slogan of the next stage in several countries, including Algeria. This was translated at the level of policies and procedures, taking into account that there are pressing challenges related to providing a sound regulatory framework after updating environmental laws and policies and long-term financing sources. Which can crystallize the following problem: What are the policies formulated by the Algerian decision-maker for the purpose of transitioning from the traditional economy to the green economy? What are the most important gains and challenges of this transition?. The paper will attempt to test the following hypotheses:

- Legal legislation and the imposition of environmental taxes are sufficient frameworks for the transition towards greenness in Algeria.

- Weak environmental performance indicators in Algeria depend on the transition to a green economy.

It therefore aims to:

- Identifying the sectors in which investment should be made in preparation for the transition to greening in Algeria.

- Statistics of the most important projects completed in Algeria to transition to a sustainable economy.

- Comparing the diversity of completed projects in relation to the sectors of the green economy or not.

- Exposure to some Arab experiences in order to compare them with their Algerian counterparts and benefit from them.

- Reviewing the most important challenges that hinder the transition towards greening in Algeria in preparation for dealing with them.

This will be done through the following elements:

First: The cognitive framework of the green economy

Second: Policies and procedures required to promote the transition to a green economy - requirements -.

Third: The gains of the transition to greening in Algeria through completed projects.

Fourth: The challenges that require the transition to greening in Algeria.

1. Cognitive Framework for The green economy:

Interest in the environmental dimension has emerged recently and has long been considered a minimum policy among countries, compared to political, military and economic issues. However, successive and extreme climate changes have made international organizations include the environment as an urgent priority, so that the green economy is an alternative to the brown economy in this context. What is meant by these economic colors?

a. Brown economy:

The brown economy is one of the economies that depends, in its basic growth rate, to a large extent on forms of activity that are destructive to the environment, especially fossil fuels such as coal, oil and gas. This type of economy causes huge levels of climate change due to the resulting greenhouse gas emissions - including Carbon dioxide and methane, in addition to air and water pollution, which is the hallmark of this type of economy with its harmful effects on a wide range of life forms. In this economic system, resources for economic development are limited and the level of environmental pollution is extremely severe, threatening the health of humans and the planet.

Uwe Dishmann, chief environmental expert at the World Bank, said that brown economic growth is an essential feature of economic development that relies heavily on fossil fuels, and it does not take into account its negative side

effects on the environment associated with production and consumption(Al-Ghobashi, 2019).

The brown economy is that economy based on fossil fuels, which increases the rates of greenhouse gases emitted into the atmosphere and its adverse effects on the global environmental system, making the world face the inevitability of moving to a green economy with low carbon emissions in order to preserve the climate.

b. Green economy and related concepts:

- The concept of the green economy: The efforts to shift from the brown economy to the green economy are one of the images that confirm that economics is the science of alternatives. The term green economy first appeared in a report entitled "An Action Plan for a Green Economy" prepared by economic experts for the United Kingdom government in 1989. It was followed by two other reports by the same group, the first entitled "Greening the Global Economy," and the second in 1994 on "Measuring Sustainable Development," before it became, starting in 2008, at the heart of the global debate in the context of searching for alternatives to the crisis of economic collapse. The paper should be original and not sections that have been taken from another scientific work (book, or dissertation) and should not be already published or forthcoming in another journal. Commitment to scientific research ethics: commitment to objectivity and scientific honesty, the author should also avoid any abuse with an ethnic background: religious, ethnic or linguistic. A narrative that remains incomplete in the eyes of many, because interest in the subject is relatively older than this date. The origins of the green economy are linked to the International Conference on the Environment organized in July 1972, in the Swedish capital Stockholm, based on a proposal from the Economic and Social Council of the United Nations, to protect the environment from... Exacerbating risks. Since then, the scope of calls for "greening" has expanded in the world, with successive demands for the need to change unsustainable consumption patterns(Mahi, 2021, p 496).

The United Nations Environment Program defines a green economy as "a system of economic activities related to the production, distribution and consumption of goods and services that, in the long run, leads to improved human well-being, and at the same time does not expose future generations to environmental risks or significant ecological scarcities." It is clear that the term green economy combines economic development with environmental considerations, which contradicts the brown economy, which is based on the intensive use of oil, natural gas, and coal, as we mentioned above. The green economy is mainly based on the use of renewable energy resources, green buildings, non-polluting public and private transportation, effective water management, and wastewater management through refining and reuse techniques(Boudaoud, 2022, p 309).

At the field level, it can be defined as an economy in which growth in income and employment is directed by investments in the public and private sectors, which would lead to enhancing the efficiency of resource use, reducing emissions and pollution, and preventing the loss of biodiversity, and this is what raises the demand for green goods and services. When a country follows a green economy policy, the results appear on the country's economy in general, not just its impact on goods. This system provides aid and grants to poor countries in order to improve education, health, and infrastructure, thus achieving the goal of justice and equality in development(Bettaher, 2019, p 200). The green economy is a broad political agenda and tool to support the achievement of sustainable development, with an emphasis on aligning economic goals with social and environmental goals. The Green Economy Agenda recognizes the potential of new sustainable technologies and green sectors to become the engine of a new development path(Kafi, Hammash, 2017, p 249).

As a summary of the above, the green economy is a new model of rapidly growing economic development, and relies on knowledge of environmental economics that aims to address the mutual relationship between human economies and the ecosystem in order to preserve the right of future generations to development, enhance the efficiency of resource use and improve the state of well-being. human rights and social justice, and thus achieve sustainability. The transition to a green economy aims to achieve many goals, the most prominent of which are(Al-Maliki, 2017, p 171):

- Linking the requirements for achieving economic, social and human development and environmental protection.

- Changing the path followed by countries, governments, and transcontinental companies in dealing with natural and human resources.

The green economy is considered an important tool for achieving sustainable development, enhancing the ability to manage natural resources in a sustainable manner, increasing the efficiency of resource use, and reducing the negative effects of development on the environment.

- Achieving economic prosperity and social security.

- Creating jobs and alleviating poverty.

- Directing private government investments to maximize resource efficiency and energy and water productivity, reduce waste and pollution, and secure new growth engines through research and development of green technology, and sustainable management of local, natural and cultural assets that enhance the local economy and the ability to create additional new job opportunities and support the poor.

- Helps the country confront the effects of climate change.

c. Sectors concerned when transitioning to a green economy:

Among the most important sectors concerned with the green economy are solar energy, wind energy, water reuse programs and rainwater harvesting. Waste management sector(Okasha, Nazi, 2021, p 03). As for the six axes of greening, which resulted from the broad Arab participation in the conference (Rio+20), where most of the Arab countries were represented at the ministerial level, and Sudan was the Arab coordinator in this conference, the Arab and international participants agreed on the final document of the conference, which bore the name "The Future We Aspire to," which adopted six basic axes, where the following was agreed upon(Barika, Boutheldja, 2017, p 57):

- Renewable energy: It is a general call to shift towards clean, renewable energy as an alternative to fossil energy such as oil and coal, the production processes associated with which have caused an increase in environmental pollution.

- Sustainable transportation: This is through the means of transportation using renewable energies at a rate greater than non-renewable ones, in order to preserve the environment.

- Water: It is one of the most important environmental indicators for sustainable development, as the latter is measured through the indicator of water quality and availability, and the per capita share of clean water. With recycling and desalination.

- Waste management: These are the processes that allow materials to be extracted or recycled, in order to reduce the waste of these materials and their accumulation in the environment.

- Sustainable agriculture: It is part of sustainable development that ensures the preservation and protection of natural resources in conjunction with activating long-term economic growth, while preserving human capital.

- Sustainable tourism: optimal exploitation of tourist sites while working to maintain environmental balance.

2. Necessary policies and procedures to promote the transition to a green economy - requirements-:

The process of transitioning to a green economy requires many necessary assumptions aimed at facilitating the transition to greenness, and they are in the form of requirements that must be available as a basis for starting the construction path. The driving engines of economic growth must also be shifted towards emerging green sectors, to "greening" existing sectors, and changing unsustainable consumption patterns, and then benefiting from the great importance of the green economy sufficient to meet the country's requirements, in terms of quantity and quality, in agriculture and in the provision of drinking water. And in the sectors of transportation and tourism, daily uses in general, and production requirements, and this continues without affecting the environment. The incentives for the

transition to the green economy are represented in the following(Okasha, Nazi, 2021, p 05):

- Paying attention to rural development with the aim of alleviating poverty: through wise management of natural resources, as well as interest in agriculture, preserving forests and using them as important resources in the country and improving the standard of living of rural residents.

- Paying attention to water, not polluting it, and working to rationalize it: Improving water efficiency and its uses can significantly reduce its consumption, and improving methods for obtaining water will contribute to providing groundwater inside wells, as well as preserving surface water.

- Preserving the available amounts of water: through the use of modern devices in homes and public facilities.

- Reducing energy subsidies directed to the transportation sector: Reducing energy subsidies in the Arab region by 25% will save more than 100 billion dollars within three years, and this amount can be transferred to greening energy and moving to it in the field of transportation, by greening 50%. From the transportation sector in Arab countries as a result of increased energy efficiency and the use of public transportation and hybrid cars, approximately $23 billion is saved annually, and $100 billion is spent on greening 20% of existing buildings over the next ten years. It is expected that more than 4 million job opportunities will be created.

Many believe that the transition path to a green economy also requires the following(Bidyar, Bakriti, 2019, p 21):

- Ensuring that institutions control technology and possess the necessary competencies, and it is better to possess new competencies in order to have a continuous training system.

- Taking into account the social dimension by having a comprehensive view of work in order to create quality job positions (working conditions, developing career paths, level of wages).

- Ensuring the integration of social partners at all levels and following up on the pace of work in the branches.

- The need for support and stimulation through targeted public spending, policy reform and changing regulations, and the development path must preserve natural capital from creating new wealth.

Among the necessary policies we find(Al-Maliki, 2017, pp 171-172):

● Review and reconsider economic policies in order to achieve a shift to sustainable patterns of production, consumption and investment.

● Preparing a comprehensive strategy for the transition towards a green economy, with the participation of the private sector and civil society organizations, with specific and clear goals and measurable indicators.

● Establishing partnerships with the private sector and the local community in order to mobilize investments and direct them to green sectors, encourage national competencies, and support green initiatives.

● Developing current economic, administrative and financial procedures and mechanisms to suit the implementation of priority programs such as rationalizing water use, raising the efficiency of energy sources, transitioning to clean energy, sustainable transportation, green buildings, and combating desertification.

● Continuous awareness of sustainable production and consumption patterns, reducing anti-environmental subsidies, and imposing environmental taxes and fines to preserve the environment and sustainability.

● Promoting innovation in the field of green technology through education, training, research and development programmes.

● Develop low-carbon strategies for industrial development, such as adopting more efficient production technology in new factories.

The requirements for transitioning to greenness require providing a base of obligations and conditions that vary between the social, economic, technological, legal, and awareness dimensions, in parallel with taking into account the environmental factor.

3. Gains of the transition to greening in Algeria through completed projects:

We will try to address these projects according to the sectors of the green economy:

a. Renewable energies: Algeria initially set out to adopt an appropriate legislative framework, where renewable energies were framed by a set of texts, the most prominent of which are(Barika, Boutheldja, 2017, p 58):

- Law No. 99-09 related to energy control.

- Law No. 02-01 relating to electricity, public distribution and natural gas through pipelines.

- Law No. 04-09 relating to the promotion of renewable energies within the framework of sustainable development aimed at protecting the environment, combating global warming, and preserving fossil energies.

Several projects have been completed within the framework of greening energy in Algeria, the most important of which are(Bidya, Bakrit, 2019, p 28):

- The Hybrid Center for Solar and Gas Energy in Hassi R'Mel (HYBRID): The first hybrid energy station in Algeria is located in Hassi R'Mel and occupies a land area

estimated at 130 hectares. It operates with natural gas and solar energy, with a production capacity of up to 150 megawatts. Connected to the national electronic grid, it is located in the Talghamt area, 25 km north of Hassi R'Mel. It is the largest gas field in Africa, and it will be a source of alternative and clean energy. The environmental factor occupies an important place in the project, as CO2 emissions have been reduced by about 33,000 tons/year compared to traditional power plants. The implementation of this project falls within the framework of the effective launch of the National Renewable Energy Program to increase 40 percent of clean energy in national electricity generation by 30-20 horizons.

- New Energy Algeria NEA: a national company mixed between the Sonatrach group and the SIM food group. It was established in 2002, and its achievements include the wind farm in Tindouf, and the use of solar energy for rural lighting in Tamanrasset and the south-west.

- Cement factories with fabric filter screens: A broad program for the renewal and modernization of pollution control equipment was issued by the management association with the participation of cement factories and the Ministry of the Environment. In total, ten of the twelve factories in Algeria have installed bag filters.

- Beni Haroun Dam: Algeria has 70 dams in operation, with a total volume of 6.8 billion m^3, and there are fourteen other dams under construction. On the technical side, the height of the dam reaches 120 m, and it has an estimated storage capacity of 960 million m^3. Moreover, its physical consistency includes three storage dams; Wadi Al-Othmaniyah, Kadia Al-Madwar and Rakis.

- Large water transportation in Ain Salah/Tamanrasset: The most important achievements: The Ain Salah/Tamanrasset project represents a firmly proactive policy to achieve one of the Millennium Development Goals of the United Nations, by meeting the needs for potable water. The Century Project, the large hydraulic transport of the Bayan area - In Salah - towards Tamanrasset is considered one of the major achievements that this vast region of the country has benefited from, as it aims to supply the city of Tamanrasset from In Salah with drinking water at a distance of more than 700 km, and allows the supply of potable water. Without interruption to more than 90,000 people.

- Desalination plants: With regard to seawater desalination, the national policy consisted of an ambitious program to install large-capacity desalination plants, nine (9) of which are in operation, and four of which are programmed. The spatial distribution of current and projected seawater desalination plants is condensed to the west, partly shaping the "water stress" in this region. More generally, the desalination strategy is responsible for the option of securing drinking water supplies in coastal and inland cities, providing the dual benefit in terms of planning, which secures a significant portion of drinking water mobilization - more than 25 percent -, but also frees up traditional resources as much as the old dams

previously allocated. For drinking water supplies to become available for irrigation purposes.

b- Intelligent architectural design: Modern architectural design that integrates the values of environmental sustainability and comfort into smart buildings, such as the Cyberparc in Sidi Abdallah. Some buildings have high environmental qualities, with an intelligent system that ensures coordinated and integrated management, computerization of technological installation, air conditioning, water distribution, control of energy performance, connection to the telecommunications network, and conversion of rainwater into irrigation water.

4. Challenges facing the transition to greenness in Algeria:

Despite the efforts made within the framework of the transition to a green economy in Algeria, the reality leads to a set of challenges that hinder the path of a smooth transition. Considering that Algeria is an Arab country, it shares with these countries the nature of these challenges, which we summarize in:

- Environmental issues continue to be considered as minimum policies: Environmental issues are still classified as what are called “minimum policies,” which are gaining less attention from successive governments in Arab countries, at a time when environmental issues have shifted from marginal interest to central interest on the agenda. Other countries, especially in light of the development taking place in the field of international interest in human rights, where the “third generation of human rights” group has emerged, which includes the human right to live in a clean environment and the right to sustainable development. This is what we record in Algeria, as there is no parallel interest between economic and political issues with environmental issues in light of the continuing comparison at the official level(Belaidi, 2022, p 329).

- Weak awareness of societal sectors about greening policies and the high costs associated with greening: The presence of societal segments that are unaware of the purposes of greening means that the economic benefits resulting from green practices will not be realized, and what is more, they may be socially resisted. The process of transitioning to a green economy is supposed to result in providing new job opportunities to reduce youth unemployment and enhance economic growth. Here, investing huge financial allocations in the process of transitioning to renewable energy may lead to an increase in the prices of energy and related goods and services, which increases pressure on the economies of the countries of the region, and then burdens citizens with a large portion of the costs in a way that raises the possibility of societal dissatisfaction with their decisions(Nasba, Rahmoun, Tabni, 2019, p 208).

- The weakness and limited role of the green parties: Here it can be pointed out that the effectiveness of the green parties in Algeria and the Arab region is limited. Despite the establishment of political parties with environmental concerns, even though they are few, such as the Algerian Green Party for Development, their

activities and influences have a weak impact on putting the environmental issue on the table. The agenda of the government and society, and an influential role in making environmental protection laws, urging respect for them and then committing to their implementation, which is radically different from the roles of green parties in European cities, such as Stockholm, Copenhagen, Amsterdam, and Hamburg, which participate in coalition governments and have succeeded in implementing the concept of "green transportation." And adopting products, services and technologies based on sustainable development(Ramada, Harmoush, Muqimh, 2019, pp 470-471).

- The problem of the interconnection of water, energy, and food and its impact on the rational management of resources: There is an interconnection between the three dimensions in the Arab region in general, and Algeria is no exception, as the latter is characterized by being rich in energy and lacking in moderate levels of water, a lack of reclaimed agricultural land given the total area, and a lack of food sufficiency. . These common links increase with the rise in societal demand for resources as a result of increasing population growth, changing consumption patterns, and poor resource management efficiency, and they will be further exacerbated by the effects of climate change. Therefore, rational management of resources requires adjustment in consumption patterns and not always increased production, especially in the areas of water, energy and hygiene(Habib, Hanish, 2012, p 316).

- Inadequate support for the provision of technology: Green technology and highly efficient processes play an essential role in the transition to a green economy. Therefore, one of the requirements for the success of the transition process is the readiness of the national infrastructure to produce identical copies of the latest global technology and adapt them to local needs, and this may be achieved. This is done by establishing an alliance between ministries of education, universities, vocational training institutes, and technical schools to train future generations on transformation in the sectors of energy and water efficiency, sustainable transportation, organic agriculture, and other sectors concerned with environmental goods and services(Barika, Boutheldja, 2017, p 62).

- Lack of funding allocated to sustainable development policies: The option of transitioning to a green economy is an expensive option and may not result in an automatic and equal gain at the economic and environmental levels, and this may be at the expense of other development goals. Therefore, we find that national banks are not encouraged to finance green projects due to fear of the economic margin of return. Financial restrictions hinder the movement in the direction of greenness, not to mention the lack of careful planning in the field of development policies(Qahham, Sharqarq, 2016, p 449).

- The path of renewable energies is faltering: The renewable energy program 2010-2030 in Algeria is still faltering despite the state's allocation of a budget estimated at 120 billion dollars to it. This is due to the presence of major obstacles and

problems obstructing the path of this program, including(Khater, Khater, 2019, p 147):

- Lack of a culture of advance planning by those concerned.
- There is a shortage of technicians and technicians in order to apply renewable energy technology, and this prevents its widespread spread, as it requires comprehensive studies of local capabilities in manufacturing.
- The difficulty of storing energy in addition to its high investment cost.
- The lack of interest in using renewable sources to produce energy, and the misunderstanding of the nature of the work and applications of renewable energy technologies by the concerned parties and society as a whole, and this led to the formation of a major obstacle towards relying on renewable sources in energy production, and here the role of media and awareness emerges to qualify individuals and society towards a correct concept of energy production. Energy comes from clean and environmentally friendly sources, which will help clarify the economic and environmental realities in these areas.
- The weak priority given to developing renewable energy, whether in terms of planning, in terms of setting public policies at the national level, or in terms of financing, so that preference remains for non-renewable energies.

Conclusion:

Through studying a topic on the policies of transition to a green economy in Algeria, the gains achieved by this, and the challenges it faces, we reached the following results:

- The increasing catastrophic effects of climate change have made the green economy inevitable, but it remains an alternative or option for now in Algeria.

- The policies adopted in Algeria still give preference to the brown economy at the expense of the green economy, as evidenced by the size of the projects completed in the two tracks.

- Given the requirements that must be met for the transition to a green economy, Algeria is still far from fully providing them, especially with regard to continuous awareness of sustainable production and consumption patterns, reducing anti-environmental subsidies, and imposing environmental taxes and fines. As well as green technology, and the involvement of the private sector and civil society.

- The problem of focusing on some greening sectors and not others in Algeria, such as focusing on investing in renewable energies other than sustainable tourism, organic agriculture, technical sorting and waste recycling. This will disrupt the

work-based transition process and integrated coordination between these sectors. Algeria is not given preference at the Arab level in this context.

- In order to go green in Algeria, the regime must summon the necessary political will and bear the responsibilities of providing the necessary base for creating environmental awareness at the popular level by involving civil society and the private sector in this, then work to provide all the necessary requirements and address the assumed challenges.

- The presence of good Arab and international experiences requires Algeria to benefit from them in the field of greening.

Recommendations:

● The inevitability of the political system in Algeria including the issue of the environment within its top policies, given the increasing side effects of environmental changes, and that what can be avoided today will not be available tomorrow.

● Focus on creating and building awareness, whether through adopting school curricula in this regard starting from the primary stage, such as approving traffic education, with the aim of raising an environmentally aware generation, and focusing on the media role in drawing attention to environmental issues and the negative effects resulting from climate change, through Appropriate coverage according to programs commensurate with the importance of the topic.

● Establishing a national apparatus for sustainable development in Algeria to try to apply an institutional perspective that combines the integration of development dimensions with their monitoring and evaluation. While ensuring the adoption of a comprehensive green economy strategy with specific objectives, because the environment is a strategic topic that requires permanent, not seasonal, attention.

● It is mandatory to involve civil society organizations and all actors in environmental issues and to value all contributions, especially youth.

● Adapting the educational system and vocational training to green professions.

● Including green specializations within the university's training tracks.

● The environment is not a national issue, so it requires the availability of efforts, including regional ones, as a necessity to support Arab environmental cooperation in investing in the relative advantages of each, especially in the field of natural resources, as well as encouraging investment in environmentally friendly projects, with an increase in financial allocations directed to research and development programs that support sustainable development.

Bibliography:

1. Al-Ghobashi Muhammad,(2019), "The shift from a brown to a green economy is imperative to save the planet", in https://www.csregypt.com/
2. Al-Maliki Abdullah bin Muhammad (2017), "The Shift to a Green Economy: International Experiences," Arab Journal of Management, Volume 37, Issue 4.
3. Bataher Bakhta, (2019), "Green buildings as a pillar for enhancing the requirements of the transition to the green economy - sustainable green architecture as a model." Al-Aseel Journal of Economic and Administrative Research, Volume 03, Issue 02.
4. Barika Al-Saeed, Boutheldja Meriem, (2017), "The Sustainable Green Economy to Achieve Sustainable Development in Algeria," Journal of Contemporary Economic Studies, Issue 3, Algeria, 2017.
5. Belaidi Mohamed, "Financing the Green Economy and Sustainable Development Requirements." Journal of Economic and Financial Studies, Volume 15, Issue 01.
6. Boudaoud Hamida, (2022), "The green economy as a model for supporting the dimensions of sustainable development, with reference to the energy transition experience in Algeria." Maaref Magazine, Volume 17, Issue 02.
7. Bidyar Amina, Bakriti Lakhdar, (2019), "The role of the green economy in activating sustainable development in Algeria," Afaq Journal for Research and Studies, Issue 4.
8. Habib Asiya, Hanish Ahmed, (2012), "The importance of adopting the green economy as an entry point to achieving sustainable development and diversifying the national economy." Journal of Business and Financial Economics, Volume 05, Issue 02.
9. Kafi Farida and Hammash Lamin, (2017), "The green economy as an alternative development model for achieving sustainable development - presenting pioneering international experiences." Journal of Business and Trade Economics, Issue 04.
10. Khater Ismahan, Khater Tariq, (2019), "Challenges of the Transition to a Green Economy and the Development of Renewable Energies in Algeria," Journal of Economic Studies and Research in Renewable Energies, Volume 6, Issue 1.
11. Lahsin Abdul Qader, (2018), "Green bonds as a tool for financing and supporting the transition to a green economy within the path of achieving sustainable development." Journal of Finance and Markets, Volume 05, Issue 01.

12. Mahi Nour Al-Huda, (2021), “The shift towards a green economy as a new model for achieving sustainable development - a study of the green energy sector in Algeria.” Journal of Finance and Markets, Volume 08, Issue 02.
13. Nasba Masoud, Rahmoun Raziqa, Tabni Maryam, (2019), “Green Economy for Sustainable Development.” Journal of Business and Trade Economics, Volume 04, Issue 02.
14. Okasha Razin, Nazi Ezzedine, (2021),“Obstacles and Challenges of Transitioning to a Green Economy for Small and Medium Enterprises in Arab Countries,” Beirut: Center for Arab Unity Studies.
15. Qahham Wahiba and Sharqarq Samir, (2016), “The Green Economy to Face Environmental Challenges and Create Job Opportunities - Green Economy Projects in Algeria.” Journal of Economic and Financial Research, Issue 06.
16. Ramadan Iman, Harmoush Iman, Muqimh Sabri, (2019), “Green Finance as a Mechanism for Promoting Sustainable Energy Projects - International Experiences with Reference to the Case of Algeria.” Journal of Business and Finance Economics, Volume 03, Issue 03.