

Developing economic procedures and mechanisms in Algeria to move towards a green economy

LalloucheGhania,* University of Algiers 3, Algeria,
Djaoudghania3@gmail.com

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Abstract:

This study aims to present the most important global indicators related to the development of the green economy, in addition to the experiences of some developed and pioneering countries in the field of transition to a green economy and how to benefit from them in the Algerian economy to transform it into a green economy. It also aims to shed light on Algeria's current efforts towards greening the economy, and to study this subject, we adopted the descriptive and analytical approach. The study concluded that the mechanisms adopted in Algeria in order to transition to a green economy are proceeding slowly as a result of several factors, the most important of which is the intensive reliance of its economy on oil energy.

Keywords: Green economy; Environmental economics; Green renewable energy; Growthgreen; Algeria.

JEL classifications codes: Q01·Q20·Q42

*.LalloucheGhania

I- Introduction:

The concept of green economy is a recent concept in the environmental and economic literature, and it was adopted by the United Nations General Assembly at the beginning of 2009 when it issued its decision to hold the United Nations Conference on Sustainable Development (Rio + 20) in 2012 under the main title (Green Economy). Many economists and environmental advocates believe that the shift towards a green economy is the desired hope for reforming what has been produced by traditional economic systems. They believe that the green economy is the best way to achieve sustainable development. The green economy is keen on the efficient use and distribution of natural resources to diversify the economic base and thus face economic fluctuations at the global level. The transition to a green economy requires a radical review and redrawing of public policies in society in order to bring about shifts in production, consumption and investment patterns. The green economy aims to achieve the goals of both social and environmental economic policies

The question of the study:

The study problem mainly lies in the misallocation of resources and environmental degradation. In other words, the failure of the prevailing economic system to solve economic and social problems such as unemployment, poverty, inflation and recurring financial crises. (Myung-bak & al, 2010, p. 25) .There are also other factors that have contributed in one way or another to the exacerbation of economic, social and environmental problems, such as global warming, climate and biodiversity crises, and fuel, food and water crises. Accordingly, we raised the following problem:

What are the procedures and mechanisms adopted in the Algerian economy to shift towards a green economy?

Hypothesis:

To answer the problem, the following hypotheses were formulated:

1 - The absence of laws, legislation and regulations related to sustainability in all its dimensions is one of the most prominent local obstacles that prevent the transition to a green economy in Algeria.

2- One of the most important challenges facing the greening of the Algerian economy is the slow pace of the transformation of the green economy.

The Objectif of the study:

Based on the study problem, its questions, and its importance, this study aims to achieve the following:

1 - Learn about the concept of green economy and the most important indicators related to the subject of the study.

2 - Reviewing the most prominent international and leading Arab experiences in the field of transition to a green economy and how to benefit from these experiences to achieve the requirements of the transition to a green economy in Algeria.

3 - It also aims to review the most prominent local efforts and challenges facing Algeria towards the transition to a new, sustainable and environmentally friendly economy.

4 - Conclusion of appropriate recommendations based on the findings of the study.

The importance of the study:

The importance of the study lies in the fact that the green economy has become one of the topics that has received great attention among the countries of the world and one of the most important fields raised in the twenty-first century for economic and environmental reasons. And because it contributes significantly to building the wealth of society and providing job opportunities while reducing environmental risks.

Methodology:

In order to study this topic, we adopted the descriptive approach in presenting definitions related to the green economy, as well as presenting the experiences of some countries. We also adopted the inferential and

analytical approach in studying the indicators of the green economy, with a study of Algeria's potential in the field of green renewable energy and the mechanisms to adopt it for the transition towards the green economy.

II- Background of the study:

1-Green economy:

The United Nations Environment Program defines a green economy as “an economy that results in an improvement in human well-being and social equality, while significantly reducing environmental risks and scarcity of ecological resources, and the green economy can be viewed in its simplest form as an economy in which carbon emissions are reduced and resource use efficiency increases”. (Environement, 2011)

The Economic and Social Commission for Western Asia (ESCWA) believes that the green economy expresses a new perspective on the interdependence between the economic, environmental and social dimensions, and aims to reduce poverty and achieve well-being. It also paves the way for mobilizing support for achieving sustainable development by adopting a new conceptual framework that does not replace sustainable development, Rather, it enshrines the integration between its three economic, social and environmental dimensions. (ESCWA: United Nation, 2011, p. 4)

Through the previous definitions, we can say that the green economy is a new economy that supports sustainable development by taking into account the environmental dimension in development, achieving social justice and the efficient use of economic resources.

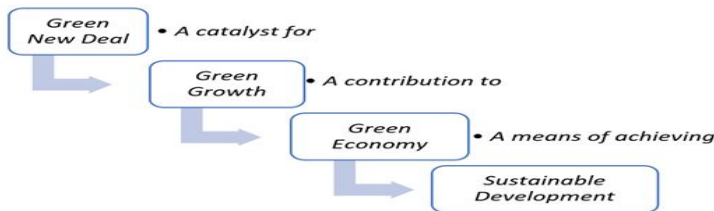
2-Green Growth:

The World Bank defines green growth as “growth that is efficient in its use of natural resources, clean in a way that reduces the impact of air pollution and environmental impacts, and robust in that it takes into account natural

risks and the role of environmental management and natural capital in preventing physical disasters. This growth must be inclusive (Internationale Labor Office, 2013, p. 16). The Organization for Economic Co-operation and Development defines green growth as “promoting economic growth and development while ensuring that it sustains Natural resources provide the environmental resources and services upon which our well-being depends. To achieve this, it must stimulate investment and innovation, which supports sustained growth and opens up new economic opportunities (OECD, 2011, p. 9) ».

In short, green growth is defined as activities centered on the environment and energy.

Fig.1.The relationship between green economy and green growth



Source:(John, 2019, p. 97)

Through the above figure, we conclude that there is an interdependent and integrated relationship between the green economy and green growth. They are considered a means to achieve sustainable development in any society.

(John, 2019, p. 97)

3-Green renewable energy

There are many definitions of this modern term, including:

- It is the energy derived from natural resources that are renewable or that cannot be implemented with environmental responsibility as it does not emit toxic gases and solar energy is included, Thermal energy, ocean

energy, wind energy, hydro energy and biomass energy. (Al Shammari Hashim & others, 2016, p. 115).

- The concept of the Organization of Petroleum Exporting Countries (OPEC): it is the energies that exist in nature its existence is repeated automatically and periodically without being implemented by its continuous exploitation (Brahim Abdullah, 2017, p. 16).

- The concept of the United Nations Environmental Protection Program (UNEP): It is energy with a non-storable stock , they undergo a periodic renewal process with an accelerated rate Consumption, and it has several forms: biomass, sunlight, hydroelectric energy, energy Earth's interior and winds (Matmati & authers, 2019, p. 14) .

So we can conclude that green energy is energy that is produced in a way that is in line with the systems Environmental, that is, it is low in pollution, characterized by being clean, environmentally friendly energy with a high stock, renewable It constantly guarantees future generations a share of it and has several sources

II-Goals of transition towards a green economy

The transition to a green economy aims to achieve many goals, the most prominent of which are:

- 1 - Linking the requirements for achieving economic, social and human development and environmental protection.
- 2 - Changing the course adopted by countries, governments and transcontinental companies in dealing with natural and human resources.
- 3 - The green economy is considered one of the important tools for achieving sustainable development and enhancing the ability to manage natural resources in a sustainable manner, increase the efficiency of resource use, reduce waste and limit the negative impacts of development on the environment.
- 4 - Achieving economic prosperity and social security.

5 - Directing private government investments to maximize resource efficiency and energy and water productivity, reduce waste and pollution, 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.

6 - Helps the country face the effects of climate change. (Environment and Development Magazine, 2015, p. 29)

III-Indicators related to the green economy

1- The Global Green Economy Index (GGEI).

This indicator generally measures the national performance of the green economy and consists of four main dimensions: climate change and leadership, sector efficiency, investment and markets, and environment and natural capital. Several indicators fall under these dimensions. The first dimension is Leadership and Climate Change and includes media coverage, global forums and climate change performance. The second dimension includes buildings, transportation, energy and tourism. The third dimension includes investment in renewable energy and clean technology innovations. The fourth and final dimension includes agriculture, air and water quality, diversity and habits, fishing and forests

Table 1. The first 10 countries in the global green economy index 2020

Rank (Sort by visualization)	The first ten places at the global level	points	Rank (Sort by visualization)	The first ten places at the level of Arab countries	points
1	Czech Republic	65.49	1	Tunisia	46.16
2	Germany	63.73	2	Egypt	35.45
3	Hungary	62.24	3	Saudi Arabia	30.75
4	Finland	60.34	4	Oman	29.10
5	Australia	56.10	5	Morocco	26.35
6	South Korea	52.43	6	Lebanon	24.49
7	China	48.57	7	Jordan	13.04
8	Japan	44.88	8	Qatar	12.66
9	Mexico	44.65	9	Kuwait	11.79
10	United States	43.13	10	Algeria	7.20

Source: (GGGI Technical Report N°16, 2020, pp. 77-81)

Czech Republic and Germany came out on top in the 2020 Global Green Economy Index. According to the report, Germany retained the first ranks, and surprisingly, the Czech Republic ranked first according to the green economy index, with Australia and the United States declining in the ranking compared to previous years. This is according to a survey of views (perception). As for performance, Sweden ranked first in the European continent, Japan and Singapore in the Asian continent. In Africa, Tanzania ranked first in terms of performance, and finally Mexico ranked first in terms of performance, according to the report. As for the Arab countries, the ranking in terms of perception was as follows: Tunisia with 46.16, Egypt with 35.45 and Saudi Arabia with 30.75. As for the arrangement according to performance, Tunisia, Egypt and Morocco ranked first, according to the report. (GGGI Technical Report N°16, 2020, pp. 77-81).

Algeria appears in the list of the top ten Arab countries, where it ranked 21st in Africa in terms of perception, with a score of 7.20, and in terms of performance, it ranked 22nd.

2-The environmental performance index for the year2022

The idea of the Environmental Performance Index (EPI) is based on ranking countries' performance on high-priority issues in two areas:

Protecting human health and protecting ecosystems (environmental). The report gives countries a score assessment on their performance on nine benchmark issues, including in the environmental health category: impacts on human health, air quality, drinking water and sanitation, and in the environmental systems category: water resources, agriculture forests, fisheries, biodiversity and natural sites (Habitat), and finally Climate and Energy.

Table 2. Global ranking of the environmental performance index 2022

global ranking	The first ten places at the global level (180 countries)	points	Arabic ranking	The first ten places at the level of Arab countries	points
1	Denmark	77.9	1	Arab Emirates	52.4
2	United King Dom	77.7	2	Djibouti	47.5
3	Finland	76.5	3	Jordan	43.6
4	Malta	75.2	4	Comoros	42.5
5	Sweden	72.7	5	Kuwait	42.4
6	Luxembourg	72.3	6	Bahrain	42.0
7	Slovenia	67.3	7	Tunisia	40.7
8	Australia	66.5	8	Saudi Arabia	37.9
9	Switzerland	65.9	9	Egypt	35.5
10	Iceland	62.8	10	Qatar	33.0

Source:(EPI Report , 2022, p. 7)

It is noticeable in the ranking of countries according to the environmental performance index that most of the countries that occupied the first ten places are European and from the Oceania region. Denmark topped the list of 180 countries, followed by Britain, Finland, Malta and Sweden.

Denmark ranked first, for its commitment to achieving a carbon-neutral society, its success in reducing air and water pollution and greenhouse gas emissions, and its high institutional capacity to address environmental problems. The report indicated that Denmark has implementable goals and measurable sustainable development indicators, and has achieved very good performance in the areas of environmental health, water and sanitation services, biodiversity protection and wildlife habitats. (EPI Report , 2022, p. 7) . For the Arab countries; Arab Emirates topped the list in the Environmental Performance Index for the year 2022, and ranked 39 globally, followed by Djibouti (60), Jordan (81), and Comoros (85). Arab Emirates got good ratings in all environmental indicators, as did most of the Gulf countries. (EPI Report , 2022, p. 7)

As for Algeria, it ranked 155 in the world, and Algeria was not among the top ten in the Arab list, as it ranked 13 in the Arab world, with a score of 29.60, after Lebanon and Oman respectively.

IV-Procedures and mechanisms of transition to a green economy

- 1- Reviewing and reconsidering economic policies in order to achieve a transition to sustainable patterns of production, consumption and investment.
- 2 - 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 objectives and measurable indicators.
- 3 - Paying attention to the development of rural areas with the aim of achieving the goals of sustainable development, the most prominent of which is achieving balanced development between cities and the periphery and creating job opportunities in those areas.
- 4 - 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. (AL Feki, 2014, p. 7)
- 5 - Developing current economic, administrative and financial procedures and mechanisms to match the implementation of priority programs such as rationalizing water use, raising the efficiency of energy sources, switching to clean energy, sustainable transportation, green buildings and combating desertification.
- 6- Making changes in doing business with the support and participation of the private sector, such as reducing pollution rates of all kinds (water, soil, air), continuous awareness of sustainable production and consumption patterns, reducing anti-environmental subsidies, and imposing environmental taxes and fines to preserve the environment and sustainability.
- 7 - Promote innovation in the field of green technology through education, training, research and development programmers.
- 8- Developing low-carbon strategies for industrial development, such as adopting the most efficient production technology in new factories. (Environment and development journal, 2012)

VI-International experiences

Reviewing the experiences of developed and pioneering countries in the transition towards a green economy shortens the distance, cost and effort for the economic decision-maker in particular, as he starts where others left off, benefits from the successful experiences that have emerged, and avoids repeating mistakes. Therefore, one of the most important objectives of this study was to identify the most prominent of these experiences and benefit from them as much as possible in the Algerian economy.

1-Developed countries

▪Denmark (green city)

Some residents of Copenhagen - the capital of Denmark - suggested more than 20 years ago that it was possible to swim in the city's port - which was heavily polluted at the time, and today it is considered the best urban environment in the world as Copenhagen works to become a green, smart and carbon-neutral city by the year 2025. Since the 1973 oil crisis, Denmark has adopted a strategy to both increase energy efficiency and diversify sources of energy supply, with a greater focus on renewable energy. As a result, the Danish economy is one of the lowest energy consuming economies in the world, renewable energy currently accounts for about 20% of total energy consumption, and the goal is to increase this proportion to 30% by 2025. Recently, the government has published plans to build a free fossil energy sector By 2050. There are three cases or experiments in greening the Danish economy, the first is related to Denmark's water consumption and wastewater treatment policy, the second is related to Denmark's energy policy, and the last is planning.(EPI Report , 2022, p. 10)

▪United Kingdom (greenhouse gas reduction)

The United Kingdom has adopted a plan through which it seeks to achieve a 34% reduction in greenhouse gas emissions from 1990 levels by the end of 2020. In 2010, the British government announced new measures that promote energy efficiency in homes and planning for residence Banks for green investments the "congestion tax" in the center of the British capital, London, has reduced 70,000 daily car trips and 20% of carbon dioxide emissions. (Al-Qabandi, 2011, p. 22)

▪ United States of America (energy production from waste)

The USA experience is considered one of the successful experiences with regard to the production of energy from waste landfills, as the production of domestic waste in the United States of America is approximately 254 million tons annually, or about 35% to 40% of it is recycled. The waste market in the United States is worth about 50 billion\$. And the US Environmental Protection Agency indicates that there are about 2,300 landfills in the United States of America, which collect waste and use it to produce electricity to light 700 homes, and to fill 1% of the demand for natural gas locally. The USA is also adopting other solutions, which is to exploit the areas of land that are not suitable for agriculture or housing, to plant solar panels on them. This step achieves several benefits, starting with building barriers to prevent the leakage of rotten soil, optimal utilization of spaces, and thus obtaining clean and renewable energy. Also, 68% of iron, 35% of aluminum, 5% of plastic and about 33% of glass are recycled.. (Al-Makki, 2017, p. 178).

2-Emerging and developing countries

▪ Singapore (quality of life)

Singapore launched its Green Plan for the first time at the World Summit on Sustainable Development in Johannesburg in 2002. The plan was motivated by concern for the city's quality of life and security of resources, as well as securing a clean and green image as a way to attract investment. How much it deals with air quality, climate change, water, waste, nature conservation and public health. The Singapore government has invested significant resources to achieve its environmental goals. One of the features that has made Singapore successful is the use of a comprehensive mix of policies and measures tailored to each environmental objective. (Al-Makki, 2017, p. 181)

▪ Mexico (reducing carbon emissions)

Mexico is one of the first countries to undertake, through its Green Economy Initiative, to voluntarily reduce carbon emissions and halve greenhouse gases by 2050. Mexico also undertakes a number of public policies and projects on resource efficiency, clean energy, and other Areas related to the green economy, such as energy, where it has developed plans to add 500 megawatts of electrical capacity generated by wind energy to the electrical grid capacity by 2012. (Al-Qabandi, 2011, p. 22)

3-Arab countries

▪ Tunisia (Development of the Renewable Energy Sector - Clean)

As for Tunisia, it started steps to develop the renewable energy sector in order to reduce dependence on oil and gas. In 2005, a law was passed under which an energy conservation system was established, and a financing mechanism was introduced, which is the National Fund for Energy Management in order to support renewable energy technology and improve energy efficiency. energy. The fund was financed by imposing a fee on the first registration of private cars that run on gasoline and diesel, and an import or production fee for air-conditioning equipment, except for those manufactured for export. From the results of that, during the period between 2000 and 2008, what was provided 1.1\$ billion in government energy bills thanks to clean energy plans.(Environement, 2011)

▪ UAE (Sustainable Model City - Masdar)

The Shams Dubai initiative has been activated to encourage residents to install photovoltaic panels on the roofs of their homes to produce electricity from solar energy in preparation for connecting it to the public grid. The Dubai Integrated Energy Strategy 2030 aims to increase the percentage of renewable energy from 7% in 2020 to 15% by 2030. The largest solar thermal power project in the world is located in the United Arab Emirates with a capacity of 500 megawatts. A model sustainable city with low water and energy consumption has also been established, provided that electricity and transportation are from carbon-free sources, and waste water (wastewater) is recycled for use in irrigation. Using 200 megawatts of clean energy (solar energy) compared to more than 800 megawatts for a

traditional city of the same size. Consumption of 8 thousand cubic meters of desalinated water per day compared to more than 20 thousand cubic meters per day in the traditional city.(Al-Makki, 2017, p. 185)

VI-Green renewable energy as an economic measure for the transition towards a green economy in Algeria:

The green economy came as an alternative to the traditional economy, and most countries, including Algeria, followed this transitional path and put in place a set of policies and strategies with the aim of achieving the transition mechanism, and relied in particular on the green renewable energy sector, as it sought to move from Exploiting fossil energy to exploit its potential in this field.

1-Green indicators related to the Algerian economy

Through this component, we will try to provide some indicators related to the green economy in Algeria, as follows:

•Green Growth Index (GGI)

The following table shows the green growth index in Algeria. According to the report, this indicator witnessed a decline compared to previous years as a result of several factors (environmental: such as the high rate of forest fires, lack of water resources, and health, which led to a high death rate), where Algeria ranked 21st in Africa, with a score of 28.02 (GGGI Technical Report N°16, 2020, p. 88)

Table 3.Green growth dimension sub-indices and Green Growth Index

	Dimensions				GGI		
	Efficient end Sustainable Resource Use	Natural Capital Protection	Green Economic Opportunities	Social Inclusion	Scores	Level	Rank
Algeria	28.43	45.45	7.20	66.27	28.02	Low	21

Source: (GGGI Technical Report N°16, 2020, p. 77)

For Algeria, the best performance is in the index Green investment, where it scored 80.50 degrees, and this is a result of the policy of programs encouraging the field of investment in environmentally friendly

products. As for the rest of the indicators represented in green trade (with a score of 4.60) and green invention (with a score of 1.00), they are very low compared to countries, Tunisia and Morocco, while the green Employment index does not include any points.

• Environmental Performance Index : (EPI)

Through the report, the Arab countries recorded a decline ranging between 15-75 points, and Algeria was among the countries that retreated the most on the environmental performance index scale between 2020 and 2023 by 71 points, as it ranked 155 globally and 13th in the Arab world after Lebanon and Oman after it was ranked 84 in the year 2020. The decline of the EPI in Algeria reflects the poor performance in the areas of environmental protection policies in various fields (EPI Report , 2022, p. 30)

Table4. Algerian's Environmental Performance Index

Component	Rank	EPI Score	10 years change
EPI	155	29.60	- 4.00
Ecosystem Vitality	155	31.60	- 0.60
Health human	82	42.00	5.40
Climate Policy	168	20.90	- 12.80

Source:(EPI Report , 2022, p. 30)

We note from the above table that most of the basic indicators related to the EPI Algeria witnessed a negative decline during 10 years, with the exception of the human health protection index, which witnessed a positive change, as Algeria ranked 82 in the world, and this is due to the policy pursued by the authorities to preserve the health of the Algerian individual from various global epidemics.

3-Algeria's potential in the field of green energy

Algeria owns most of the green energy resources, and seeks to produce them according to a development plan based on its energy program the following table illustrates this:

Tab N5. Green energy potential in Algeria

	solar energy	hydropower	underground energy	Wind Energy	Bio energy
Available capabilities	Algeria can produce 169,440 TWh annually	Algeria has 153 sites for the exploitation of water energy, but it exploits only 15 of them within the limits of 13 hydraulic station	Algeria has 200 thermal springs and an underground water reservoir in the desert that enables it to produce more than 700 Giga watts annually.	Although Algeria is located in a region with strong winds, the exploited capabilities are very limited	Algeria can produce more than 2032.6 GWh
Produced energy for the year 2017	62% of green energy production, equivalent to 425 megawatts	33% of green energy production, equivalent to 280 megawatts	4%, equivalent to 25 megawatts	1% equals 10 megawatts	0% unused

Source:(Mahi, 2021, p. 502)

Algeria relies on an energy program to invest in green energy, divided into periods, and through which it aims to achieve energy security, environmental security and social security, directed at the local market, Comprehensive about the most appropriate type of green energy in the current period. Among the most important points that came with this program, we mention them : (Mahi, 2021, p. 502)

- Algeria has natural potentials that help it spread renewable energy and increase its capacity to generate electricity, according to what was monitored by the Energy Research Unit.
- Official data, seen by the Energy Research Unit, show that the rate of solar radiation throughout Algeria ranges between 2,000 and 3,900 hours annually.
- This comes with the expectation of a report by the World Energy Forum that solar energy will account for 30-40% of the electricity produced in Algeria by 2030.
- In the same context, the World Wind Energy Council confirmed, in a previous report, that Algeria has remarkable potential in wind energy, but considered that the country’s continued dependence on fossil fuels poses a challenge to its exploitation and expansion.
- It is noteworthy that the first project to be launched within the country's renewable energy program, which aims to generate 15 GW by 2035, is the solar energy project in Algeria (Solar 1000).

- This project includes the implementation of photovoltaic solar plants with a total capacity of 1,000 megawatts, with Algeria intending to start producing the first 50 megawatts of the project early next year (2023).

4-Challenges facing the exploitation of green energies in Algeria

They can be summarized as follows: (Boudghene Stambouli, 2011, p. 45)

- Algeria is considered one of the countries rich in fossil energy, which is one of the factors that led to the slow rush of officials towards green energy, for fear of a negative impact on the oil production system and its prices.
- High capital required for renewable energy projects.
- The difficulty of providing real estate containers from the large land areas that must be allocated for wind and solar energy projects.
- Limited local manufacturing capabilities for green energy production equipment and the inability to compete with international companies, in addition to weak financial allocations for scientific research and development of green energy equipment.

The production and use of advanced technologies in energy production (solar energy, wind energy, and biofuels) requires the concerted efforts of a large number of partners, including manufacturing companies, users, relevant legislative and executive bodies, and scientific research.

- Lack of interest in the use of renewable sources for energy production and a misunderstanding of the nature of work and applications of green energy technologies. Here, the role of information and awareness emerges to push towards qualifying individuals and society towards the correct concept of energy production from clean and environmentally friendly sources.

Conclusion:

The transition to a green economy is supportive of growth, income and job creation. The green economy replaces fossil fuels with clean energy and low-emission technology.

Despite the strenuous efforts made by Algeria in order to preserve the environment and green the sectors of the economy, it is characterized by slowness and low investments in it. The study found the following:

-Green indicators confirm that Algeria is far from economic greening as a result of weak economic mechanisms.

-The low rate of investments aimed at transitioning to a green economy in Algeria as a result of the dependence of its economy on fossil fuels, especially oil.

-There are resources that have not been exploited optimally, such as seasonal rainwater, dams to generate electric power, wind energy, waste recycling and waste-to-energy conversion, as well as other marine resources and others.

- The environmental index has declined as a result of climate change and the clear rise in carbon dioxide emission rates in Algeria, due to facing drought, lack of rain, unregulated grazing, excessive logging and forest fires, especially in recent years.

-Weak awareness programs directed towards the environment and the transition towards a green economy.

- Low spending on scientific research related to environmental economics or green economy.

The problem of the study was mainly represented in the failure of the prevailing economic system in solving economic and social problems such as unemployment, poverty, inflation and recurring financial crises. Based on the above and the findings of the study, the study recommends the following:

-Increasing investments aimed at transitioning to a green economy such as renewable energy (solar and wind energy) and providing various regions of Algeria with desalinated water networks, waste recycling and wastewater treatment. With the involvement of the private sector in supporting efforts to transition towards a green economy

-Exploiting seasonal rain water by building more dams in various national regions and building places to collect and preserve this water in other

places where it may not be possible to build dams, and power generation stations can be built on these dams.

- Benefit from the experiences of leading countries and cities in the field of green economy, or other green initiatives, especially in the field of recycling and converting waste into energy, like the American experience, in order to create green jobs in Algeria and thus reduce unemployment
- Establishment of a higher central committee for the green economy shared by all ministries, whose tasks would be to propose strategic directives, ensure follow-up and continuous development of the various approved programs, and evaluate their economic, social and environmental results.
- Developing the necessary legislation and regulations for the transition to green building.
- Increasing spending on scientific research directed towards the field of green and environmental economics.
- Including in university and school curricula vocabulary about the components of the green economy and green growth, and the importance of that among generations as a guarantee of sustainable development.

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